Service
Service
Service

Service Manual

Horizontal Frequency
30 - 83kHz

Table of Contents

Description	Page	Description	Page
Table of Contents	1	6.Schematic	24
Revision List	2	6.1.Main Board	24
Important Safety Notice	3	6.2.Power Board	29
1.Monitor Specification	4	7.PCB Layout	31
2.LCD Monitor Description	5	7.1.Main Board	31
3.Operation Instruction	6	7.2.Power Board	33
3.1.General Instructions	6	7.3.Key Board	36
3.2.Control Buttons and Connections	6	8.Maintainability	37
3.3.OSD Setting	8	8.1.Equipments and Tools Requirement	37
4.Input/Output Specification	18	8.2.Trouble Shooting	38
4.1.Input Signal Connector	18	9.White-Balance,Luminance Adjustment	42
4.2.Preset Display Modes	19	10.Monitor Exploded View	44
4.3.Panel Specification	20	11.BOM List	45
5.Block Diagram	22		
5.1.Main Board	22		
5.2.Power Board	23		

SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFOMER FOR THIS UNIT WHEN SERVICING

Revision List

Version	Release Date	Revision History	TPV Model Name
A00	Jun.-29-2011	Initial release	HDBMNZNEAHA1DNE
A01	Feb.-26-2012	Add new models	HDB2NZ2EAHA1DNE
			HDB2NZ2EAHA2DNE
			HDB2NZ2FAHA1DNE
			HDB2NZ2JAHA1DNE
			HDB2NZ6BDFA1DNE
			HDBMNZ2FAHA1DNE
			HDBMNZ2JAHA1DNE
			HDBMNZ6BAHA1DNE
			HDC2NZ2FAHA2DNE
			HDC2NZ2LAHA4DNE
			HDC2NZ6BDFA1DNE
			HDC2NZ6BDFA3DNE
			HDC2NZ6BDFA4DNE

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.
Hereafter throughout this manual, AOC Company will be referred to as AOC.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design.
Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:
DANGER-Invisible laser radiation when open AVOID DIRECT EXPOSURE TO BEAM.
CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.
Take care during handling the LCD module with backlight unit
-Must mount the module using mounting holes arranged in four corners.
-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
-Make certain that treatment person’s body is grounded through wristband.
-Do not leave the module in high temperature and in areas of high humidity for a long time.
-Avoid contact with water as it may a short circuit within the module.
-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

1.Monitor Specifications

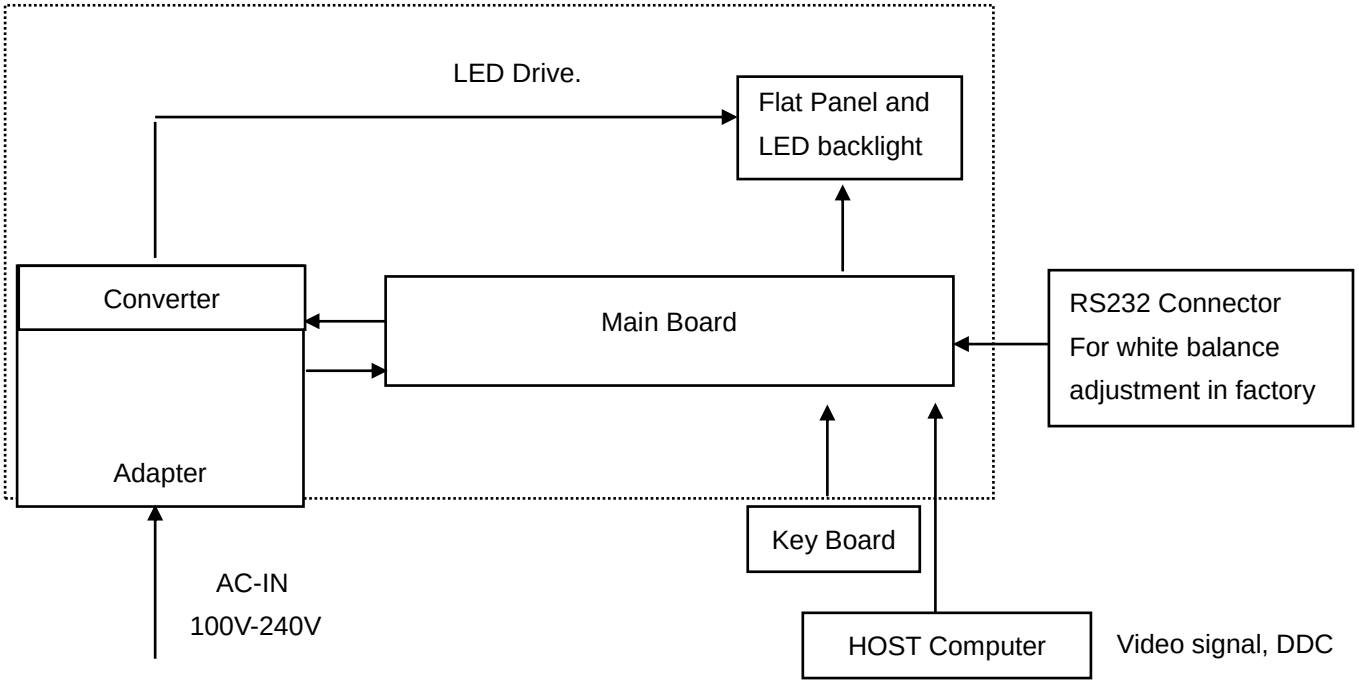
Panel	Model name	**e2450Swda / e2450Swdak/ e2450Swd/ e2450Swh / e2450Swhk**
	Driving system	TFT Color LCD
	Viewable Image Size	59.8cm diagonal
	Pixel pitch	0.2715mm(H)X0.2715mm(V)
	Video	R, G, B Analog Interface&Digital Interface
	Video	R, G, B Analog Interface&Digital Interface&HDMI（**e2450Swh / e2450Swhk**）
	Separate Sync.	H/V TTL
	Display Color	16.7M Colors
	Dot Clock	148.5 MHz
Resolution	Horizontal scan range	30 kHz - 83 kHz
	Horizontal scan Size(Maximum)	521.28mm
	Vertical scan range	50 Hz - 76 Hz
	Vertical scan Size(Maximum)	293.22mm
	Optimal preset resolution	1920x 1080 (60 Hz)
	Plug & Play	VESA DDC2B、DDC/CI
	Input Connector	D-Sub 15pin, DVI 24pin
	Input Connector	D-Sub 15pin, DVI 24pin,HDMI(**e2450Swh / e2450Swhk**)
	Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM, TMDS
	Power Source	100-240V~, 50/60Hz
	Power Consumption	Active: 30 W (typical)
		Active: 33 W (typical)（**e2450Swh / e2450Swhk**）
		Standby 0.5 W
	Off timer	0-24 hrs
	Speakers	2WX2（**e2450Swda / e2450Swdak/ e2450Swh / e2450Swhk**）
Physical Characteristics	Connector Type	15-pin Mini D-Sub,DVI-D
	Connector Type	15-pin Mini D-Sub,DVI-D,HDMI（**e2450Swh / e2450Swhk**）
	Signal Cable Type	Detachable
Environmental	Temperature:	
	Operating	0° to 40°
	Non-Operating	-25° to 55°
	Humidity:	
	Operating	10% to 85% (non-condensing)
	Non-Operating	5% to 93% (non-condensing)

2.LCD Monitor Description

The LCD monitor will contain a main board, an adapter board, a converter board and a key board which house the flat panel control logic, brightness control logic and DDC.

The power part will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.

Monitor Block Diagram



3. Operating Instructions

3.1 General Instructions

Press the power button to turn the monitor on or off. The other control knobs are located at front panel of the monitor (See Figure). By changing these settings, the picture can be adjusted to your personal preferences.

* The power cord should be connected.

* Press the power button to turn on the monitor. The power indicator will light up.

3.2 Control Buttons and Connections

1	ECO / DCR / Volume -
2	4:3 or Wide / Volume +
3	Source / Auto / Exit
4	Menu/Enter
5	Power

Power

Press the Power button to turn on/off the monitor.

Eco (DCR)/ -

Press the Eco key continuously to select the Eco mode of brightness and DCR on when there is no OSD. (Eco mode hot key may not be available in all models).

Volume

When there is no OSD, Press Volume button to active volume djustment bar, Press - or + to adjust volume(Only for the models with speakers)

4 : 3 or wide/+

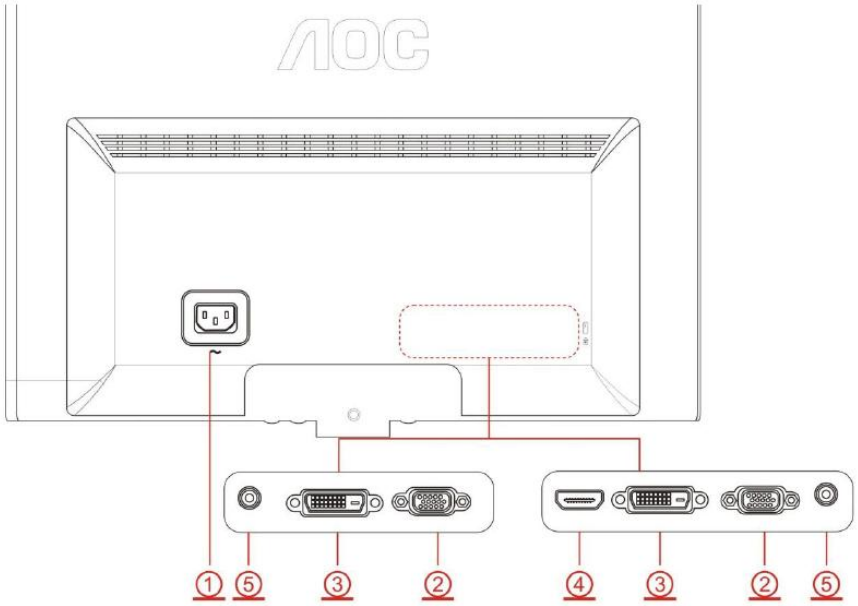
When there is no OSD, Press + continuously to change 4:3 or wide image ratio. (If the product screen size is 4:3 or input signal resolution is wide format, the hot key is disable to adjust.)

Auto / Exit

When there is no OSD, press Auto / Exit button continuously to do auto configure. (For the models with one input)
When there is no OSD, press Auto / Exit button continuously about 3 second to do auto configure. (Only for the models with dual or more inputs)

Source hot key

When the OSD is closed, press Source button will be Source hot key function. Press Source button continuously to select the input source showed in the message bar , press Menu/Enter button to change to the source selected. (Only for the models with dual or more inputs).



1. AC port

2. VGA

3. DVI (available for selected models)

4. HDMI(available for selected models)

5. Audio(available for selected models)

To protect equipment, always turn off the PC and LCD monitor before connecting.

1. Connect the power cable to the AC port on the back of the monitor.

2. Connect one end of the 15-pin D-Sub cable to the back of the monitor and connect the other end to the computer's D-Sub port.

3. Optional –(Requires a video card with DVI port) - Connect one end of the DVI cable to the back of the monitor and connect the other end to the computer’s DVI port.

4. Optional –(Requires a video card with HDMI port) - Connect one end of the HDMI cable to the back of the monitor and connect the other end to the computer’s HDMI port.

5. Optional –(Requires a video card with Audio port) - Connect one end of the Audio cable to the back of the monitor and connect the other end to the computer’s Audio port..

6. Turn on your monitor and computer.

If your monitor displays an image, installation is complete. If it does not display an image, please refer Troubleshooting.

3.3 OSD Setting

Basic and simple instruction on the control keys.

1)Press the **MENU**-button to activate the OSD window.

2) Press **-** or + to navigate through the functions. Once the desired function is highlighted, press the **MENU**-button to activate it . press **-** or **+** to navigate through the sub-menu functions. Once the desired function is highlighted, press **MENU**-button to activate it.

3) Press **-** or **+** to change the settings of the selected function. Press **AUTO** to exit. If you want to adjust any other function, repeat steps 2-3.

4) OSD Lock Function: To lock the OSD, press and hold the **MENU** button while the monitor is off and then press **power** button to turn the monitor on. To un-lock the OSD - press and hold the **MENU** button while the monitor is off and then press **power** button to turn the monitor on.

Notes:

1) If the product has only one signal input, the item of "Input Select" is disable to adjust.

2) If the product screen size is 4:3 or input signal resolution is wide format, the item of "Image Ratio" is disable to adjust.

3) One of DCR, Color Boost, and Picture Boost functions is active, the other two function is turned off accordingly.

Luminance

1 Press **MENU** (Menu) to display menu.

2 Press - or + to select (Luminance), and press **MENU** to enter.

3 Press - or + to select submenu, and press **MENU** to enter.

4 Press - or + to adjust.

5 Press **AUTO** to exit.

	Brightness	0-100		Backlight Adjustment
	Contrast	0-100		Contrast from Digital-register.
	Eco mode	Standard		Standard Mode
		Text		Text Mode
		Internet		Internet Mode
		Game		Game Mode
		Movie		Movie Mode
		Sports		Sports Mode
	Gamma	Gamma1		Adjust to Gamma1
		Gamma2		Adjust to Gamma 2
		Gamma3		Adjust to Gamma 3
	DCR	Off		Disable dynamic contrast ratio
		On		Enable dynamic contrast ratio
	Overdrive (Optional)	Strong		Adjust the response time
		Medium		
		Weak		
		Off		

Image Setup

1 Press **MENU** (Menu) to display menu.

2 Press - or + to select (Image Setup), and press **MENU** to enter.

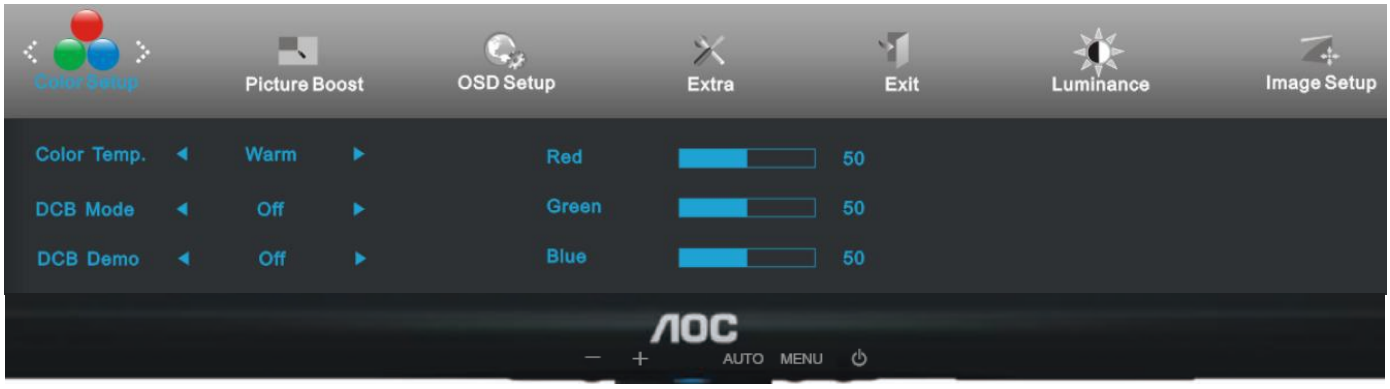
3 Press - or + to select submenu, and press **MENU** to enter.

4 Press - or + to adjust.

5 Press **AUTO** to exit.

	Clock	0-100	Adjust picture Clock to reduce Vertical-Line noise.
	Phase	0-100	Adjust Picture Phase to reduce Horizontal-Line noise
	Sharpness	0-100	Adjust picture sharpness
	H.Position	0-100	Adjust the horizontal position of the picture.
	V.Position	0-100	Adjust the vertical position of the picture.

Color Setup



1 Press **MENU** (Menu) to display menu.

2 Press - or + to select (Color Setup), and press **MENU** to enter.

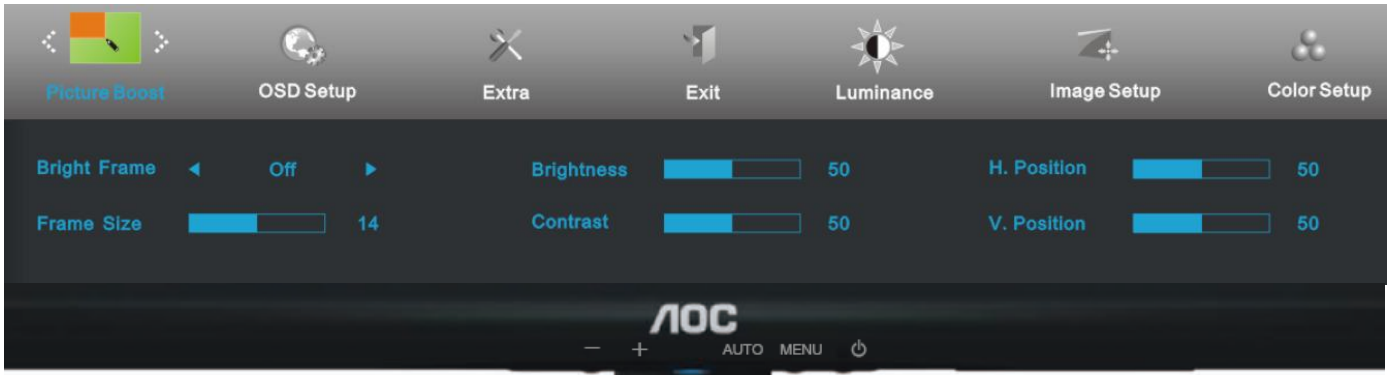
3 Press - or + to select submenu, and press **MENU** to enter.

4 Press - or + to adjust.

5 Press **AUTO** to exit.

	Color setup.	Warm		Recall Warm Color Temperature from EEPROM.
		Normal		Recall Normal Color Temperature from EEPROM.
		Cool		Recall Cool Color Temperature from EEPROM.
		sRGB		Recall SRGB Color Temperature from EEPROM.
		User	Red	Red Gain from Digital-register
			Green	Green Gain Digital-register.
			Blue	Blue Gain from Digital-register
	DCB Mode	Full Enhance	on or off	Disable or Enable Full Enhance Mode
		Nature Skin	on or off	Disable or Enable Nature Skin Mode
		Green Field	on or off	Disable or Enable Green Field Mode
		Sky-blue	on or off	Disable or Enable Sky-blue Mode
		AutoDetect	on or off	Disable or Enable AutoDetect Mode
	DCB Demo		On or off	Disable or Enable Demo

Picture Boost



1 Press **MENU** (Menu) to display menu.

2 Press - or + to select (Picture Boost), and press **MENU** to enter.

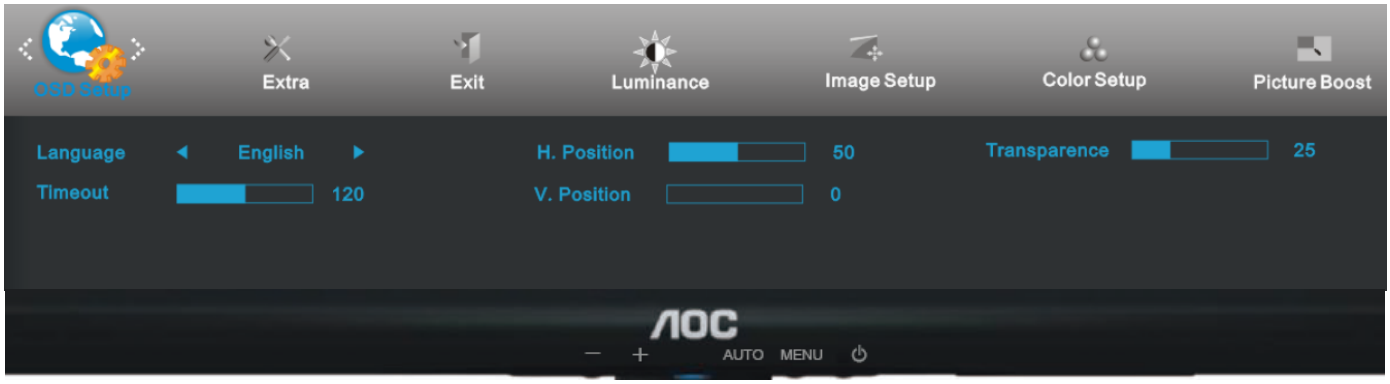
3 Press - or + to select submenu, and press **MENU** to enter.

4 Press - or + to adjust.

5 Press **AUTO** to exit.

	Frame Size	14-100	Adjust Frame Size
	Brightness	0-100	Adjust Frame Brightness
	Contrast	0-100	Adjust Frame Contrast
	H. position	0-100	Adjust Frame horizontal Position
	V.position	0-100	Adjust Frame vertical Position
	Bright Frame	on or off	Disable or Enable Bright Frame

OSD Setup



1 Press **MENU** (Menu) to display menu.

2 Press - or + to select (OSD Setup), and press **MENU** to enter.

3 Press - or + to select submenu, and press **MENU** to enter.

4 Press - or + to adjust.

5 Press **AUTO** to exit.

	H.Position	0-100	Adjust the horizontal position of OSD
	V.Position	0-100	Adjust the vertical position of OSD
	Timeout	5-120	Adjust the OSD Timeout
	Transparence	0-100	Adjust the transparence of OSD
	Language		Select the OSD language

Extra

1 Press **MENU** (Menu) to display menu.

2 Press - or + to select (Extra), and press **MENU** to enter.

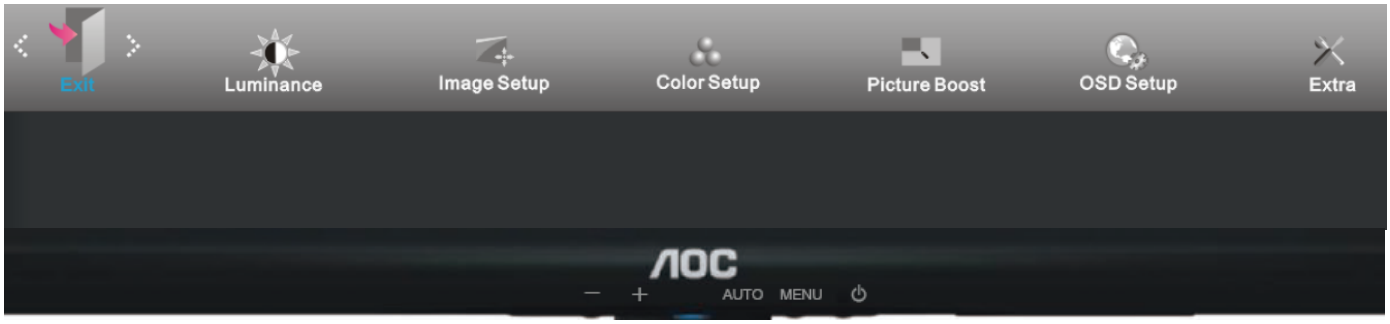
3 Press - or + to select submenu, and press **MENU** to enter.

4 Press - or + to adjust.

5 Press **AUTO** to exit.

	Input Select	Auto (For the models with dual or more inputs)	Select to Auto Detect input signal
		D-SUB	Select Analog Signal Source as Input
		DVI (available for selected models)	Select DVI Sinal Source as Input
		HDMI(available for selected models)	Select HDMI Sinal Source as Input
	Auto Config	yes or no	Auto adjust the picture to default.
	Off timer	0-24hrs	Select DC off time.
	Image Ratio	wide or 4:3	Select wide or 4:3 format for display.
	DDC-CI	yes or no	Turn ON/OFF DDC-CI Support.
	Reset	yes or no	Reset the menu to default.
	Information		Show the information of the main image and sub-image source.

Exit



1 Press **MENU** (Menu) to display menu.

2 Press - or + to select (Exit), and press **MENU** to enter.

3 Press - or + to select submenu, and press **MENU** to enter.

4 Press - or + to adjust.

5 Press **AUTO** to exit.

	Exit		Exit the main OSD

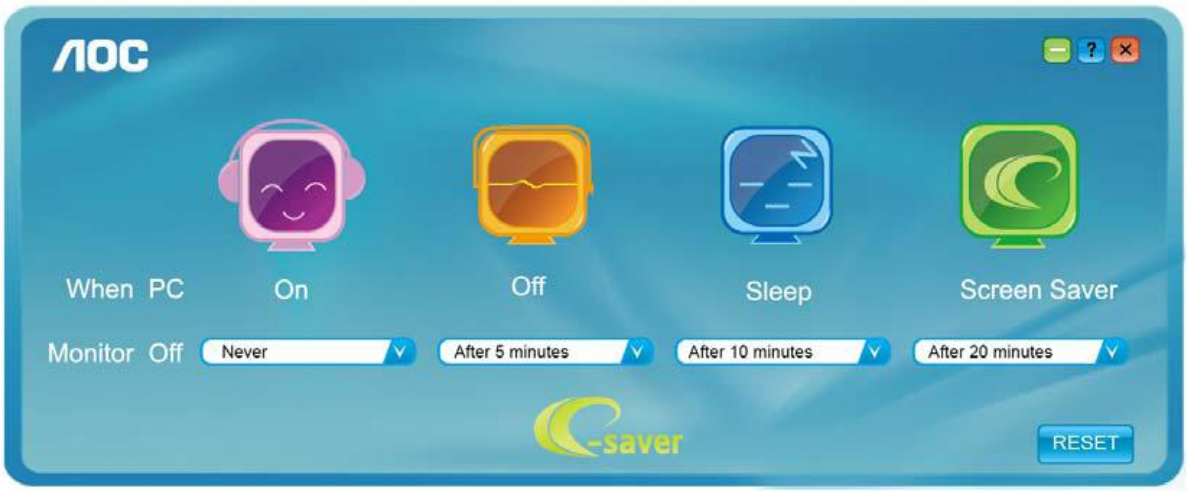
LED Indicators

Status	LED Color	
Full Power Mode	Green or Blue	
Active-off Mode	Orange or red	

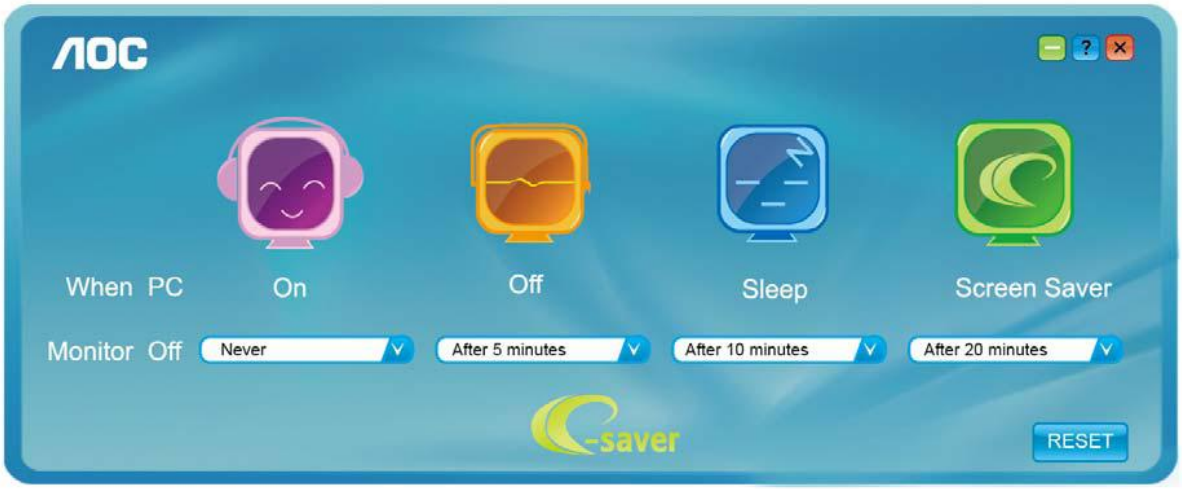
e-Saver

Welcome to use AOC e-Saver monitor power management software! The AOC e-Saver features Smart Shutdown functions for your monitors, allows your monitor to timely shutdown when PC unit is at any status (On, Off, Sleep or Screen Saver); the actual shutdown time depends on your preferences (see example below).
Please click on "driver/e-Saver/setup.exe" to start installing the e-Saver software, follow the install wizard to complete software installation.

Under each of the four PC status, you may choose from the pull-down menu the desired time (in minutes) for your monitor to automatically shutdown. The example above illustrated:
1) The monitor will never shutdown when the PC is powered on.
2) The monitor will automatically shutdown 5 minutes after the PC is powered off.
3) The monitor will automatically shutdown 10 minutes after the PC is in sleep/stand-by mode.
4) The monitor will automatically shutdown 20 minutes after the screen saver appears.



You can click “RESET” to set the e-Saver to its default settings like below.



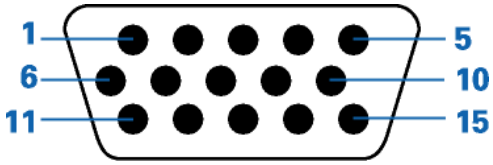
Screen+

Welcome to "Screen+" software by AOC, Screen+ software is a desktop screen splitting tool, it splits the desktop into different panes, each pane displays a different window. You only need to drag the window to a corresponding pane, when you want to access it. It supports multiple monitor display to make your task easier. Please follow the installation software to install it.

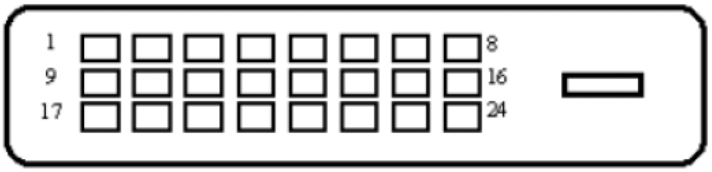
4. Input/Output Specification

4.1 Input Signal Connector

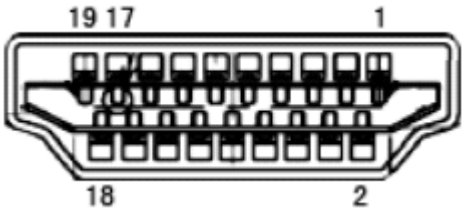
Analog connector



Pin Number	15-Pin Side of the Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	N.C.
5	Detect Cable
6	GND-R
7	GND-G
8	GND-B
9	+5V
10	Ground
11	N.C.
12	DDC-Serial data
13	H-sync
14	V-sync
15	DDC-Serial clock



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS Data 2-	9	TMDS Data 1-	17	TMDS Data 0-
2	TMDS Data 2+	10	TMDS Data 1+	18	TMDS Data 0+
3	TMDS Data 2/4 Shield	11	TMDS Data 1/3 Shield	19	TMDS Data 0/5 Shield
4	TMDS Data 4-	12	TMDS Data 3-	20	TMDS Data 5-
5	TMDS Data 4+	13	TMDS Data 3+	21	TMDS Data 5+
6	DDC Clock	14	+5V Power	22	TMDS Clock Shield
7	DDC Data	15	Ground(for+5V)	23	TMDS Clock +
8	N.C.	16	Hot Plug Detect	24	TMDS Clock -



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS Data 2+	9	TMDS Data 0	17	DDC/CEC Ground
2	TMDS Data 2 Shield	10	TMDS Clock +	18	+5V Power
3	TMDS Data 2	11	TMDS Clock Shield	19	Hot Plug Detect
4	TMDS Data 1+	12	TMDS Clock		
5	TMDS Data 1Shield	13	CEC		
6	TMDS Data 1	14	Reserved (N.C. on device		
7	TMDS Data 0+	15	SCL		
8	TMDS Data 0 Shield	16	SDA		

4.2 Preset Display Modes

STAND	RESOLUTION	HORIZONTAL FREQUENCY (KHz)	VERTICAL FREQUENCY (Hz)	Panel Size							
				18.5"	19"	19.5"	20"	21.5"	22"	23"	23.6"
VGA	640 X 480@60Hz	31.469	59.940	√	√	√	√	√	√	√	√
	640 X 480@67Hz	35.000	66.667	√	√	√	√	√	√	√	√
	640 X 480@72Hz	37.861	72.809	√	√	√	√	√	√	√	√
	640 X 480@75Hz	37.500	75.000	√	√	√	√	√	√	√	√
DOS MODE	720 X 400@70Hz	31.469	70.087	√	√	√	√	√	√	√	√
SVGA	800 X 600@56Hz	35.156	56.250	√	√	√	√	√	√	√	√
	800 X 600@60Hz	37.879	60.317	√	√	√	√	√	√	√	√
	800 X 600@72Hz	48.077	72.188	√	√	√	√	√	√	√	√
	800 X 600@75Hz	46.875	75.000	√	√	√	√	√	√	√	√
MAC MODE	832 X 624@75Hz	49.725	74.551	√	√	√	√	√	√	√	√
XGA	1024 X 768@60Hz	48.363	60.004	√	√	√	√	√	√	√	√
	1024 X 768@70Hz	56.476	70.069	√	√	√	√	√	√	√	√
	1024 X 768@75Hz	60.023	75.029	√	√	√	√	√	√	√	√
WXGA	1280 X 720@60Hz	45.000	60.000				√				
VESA-MODE	1280 X 960@60Hz	60.000	60.000						√	√	
SXGA	1280 X 1024@60Hz	63.981	60.020		√	√		√	√	√	√
	1280 X 1024@75Hz	79.976	75.025		√	√		√	√	√	√
WXGA	1360 X 768@60Hz	47.712	60.015	√							
	1366 X 768@60Hz	47.712	59.790	√							
WXGA+	1440 X 900@60Hz	55.935	59.876		√			√	√	√	√
WSXGA	1600 X 900@60Hz	60.000	59.950			√	√				
WSXGA+	1680 X 1050@60Hz	65.290	59.950					√	√	√	√
FHD	1920 X 1080@60Hz	67.500	60.000					√		√	√

4.3 Panel Specification

4.3.1 General Features

M236H3-LA3 is a 23.6” TFT Liquid Crystal Display module with WLED Backlight unit and 30 pins 2ch-LVDS interface. This module supports 1920 x 1080 Full HD mode and can display up to 16.7M colors. The converter module for Backlight is not built in.

4.3.2 General Specifications

Item	Specification	Unit
Screen Size	23.547” real diagonal	
Driver Element	a-si TFT active matrix	-
Pixel Number	1920 x R.G.B. x 1080	pixel
Pixel Pitch	0.2715 (H) x 0.2715 (V)	mm
Pixel Arrangement	RGB vertical stripe	-
Display Colors	16.7M	color
Transmissive Mode	Normally white	-
Surface Treatment	AG type, 3H hard coating, Haze 25	-
Luminance, White	300	Cd/m2
Color Gamut	72% of NTSC(Typ.)	-
TCO	TCO 5.0 compliance	-
Power Consumption	Total 18.95W(Max.)@cell 6.35W (Max.), BL 12.60W (Max.)	

Item		Min.	Typ.	Max.	Unit
Module Size	Horizontal (H)	544.3	544.8	545.3	mm
	Vertical (V)	320.0	320.5	321.0	mm
	Thickness (T)	-	11.4	11.9	mm
Bezel Area	Horizontal	525.07	525.22	525.37	mm
	Vertical	297.07	297.22	297.37	mm
Active Area	Horizontal	-	521.28	-	mm
	Vertical	-	293.22	-	mm
Weight		-	2510	2610	g

4.3.3 Electrical Characteristics

Electrical characteristics

Parameter		Symbol	Value			Unit
			Min.	Typ.	Max.	
Power Supply Voltage		Vcc	4.5	5.0	5.5	V
Ripple Voltage		V_{RP}	-	-	300	mV
Rush Current		I_{RUSH}	-	1.52	3	A
Power Supply Current	White		-	0.41	0.53	A
	Black		-	0.98	1.27	A
	Vertical Stripe		-	0.95	1.27	A
Power Consumption		PLCD	-	4.9	6.35	Watt
LVDS differential input voltage		Vid	200	-	600	mV
LVDS common input voltage		Vic	1.0	1.2	1.4	V
Logic High Input Voltage		VIH	2.64	-	3.6	V
Logic Low Input Voltage		VIL	0	-	0.66	V

LED array electrical characteristics

Parameter	Symbol	Value			Unit	Note
		Min.	Typ.	Max.		
LED Light Bar Input Voltage Per Input Pin	VPIN	26.1	28.8	31.5	V	(1), Duty=100%, IPIN=50mA
LED Light Bar Current Per Input Pin	IPIN	0	50	56	mA	(1), (2) Duty=100%
LED Life Time	LLED	30000			Hrs	(3)
Power Consumption	PBL	---	11.52	12.6	W	(1) Duty=100%, IPIN=50mA

Note

(1) LED light bar input voltage and current are measured by utilizing a true RMS multimeter as shown below:

(2) PBL = IPIN × VPIN × (8) input pins , LED light bar circuit is (9)Series, (8)Parallel.

(3) The lifetime of LED is defined as the time when LED packages continue to operate under the conditions at Ta = 25 ±2 ℃ and I= (25)mA (per chip) until the brightness becomes ≦ 50% of its original value.

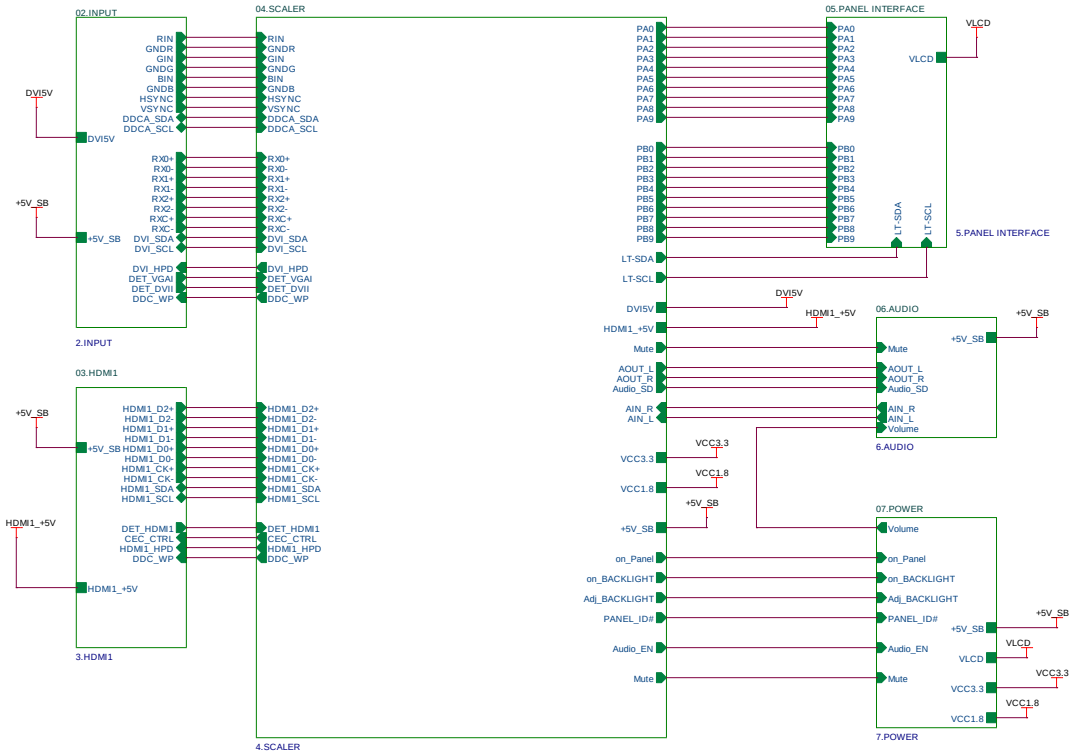
4.3.4 Optical Characteristics

Ta= 25°C ,

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Color Chromaticity (CIE 1931)	Red	Rx	θ_x=0° , θ_Y =0°	Typ – 0.03	0.641	Typ + 0.03	-
		Ry			0.338		
	Green	Gx			0.311		
		Gy			0.619		
	Blue	Bx			0.159		
		By			0.059		
	White	Wx			0.313		
		Wy			0.329		
Center Luminance of White (Center of Screen)		L_C		250	300	-	cd/m^2
Contrast Ratio		CR		700	1000	-	-
Response Time		T_R	θ_x=0° , θ_Y =0°	-	1.5	2.5	ms
		T_F		-	3.5	5.5	
White Variation		δW	θ_x=0° , θ_Y =0° USB2000	70			%
Viewing Angle	Horizontal	θx- + θx+	CR ≧ 10 USB2000	150	170	-	Deg.
	Vertical	θy- + θy+		140	160	-	
Viewing Angle	Horizontal	θx- + θx+	CR ≧ 5 USB2000	160	178	---	Deg.
	Vertical	θy- + θy+		150	170	---	

5. Block Diagram

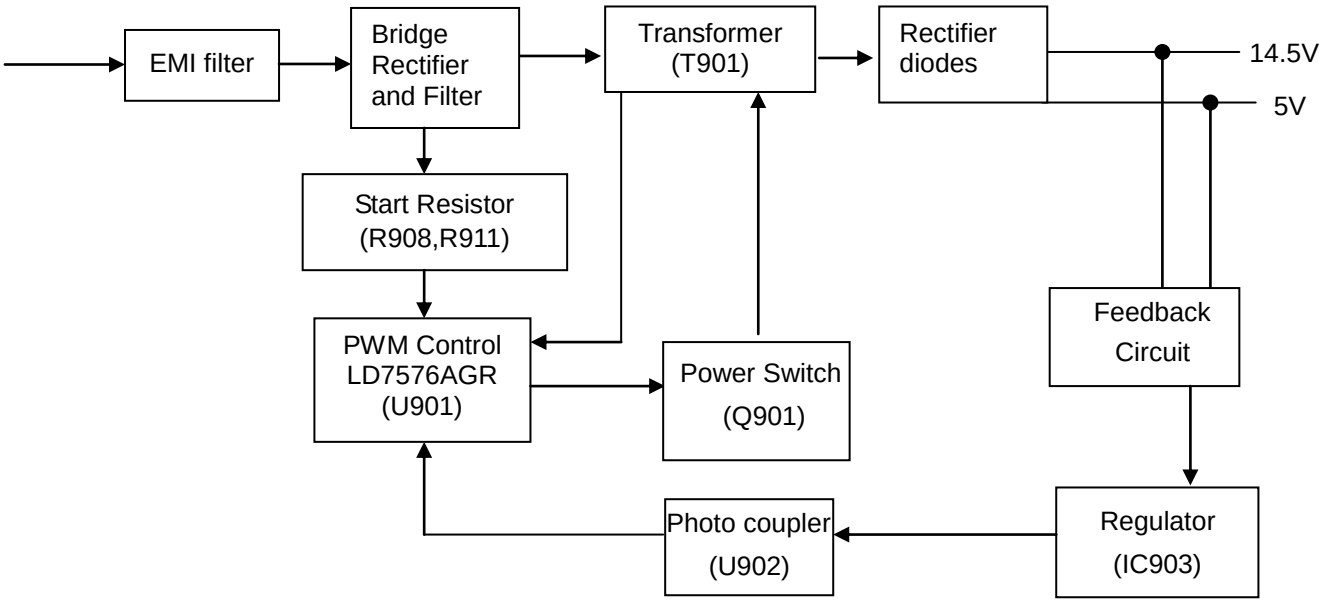
5.1 Main Board

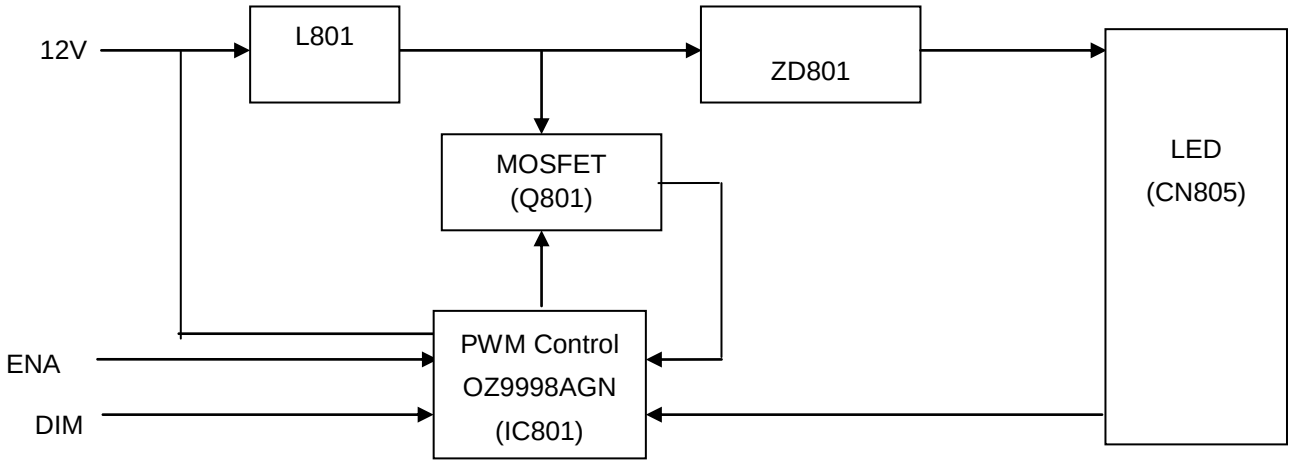


TPV	T P V (Top Victory Electronics Co., Ltd.)		OEM MODEL	MMD	Size	B
	延 陽 瓜 蝸 販	715G4641-M0G-000-0040-2-110211	TPV MODEL	MMD 227E3 LH / LPH	Rev	A
	Key Component	1.1 COVER & REVISE HISTORY	PCB NAME	715G4641-M0G-000-0040-2	称 爹	<称 爹>
	Date	Tuesday, April 12, 2011	Sheet	2 of 8		

5.2 Power Board

AC input

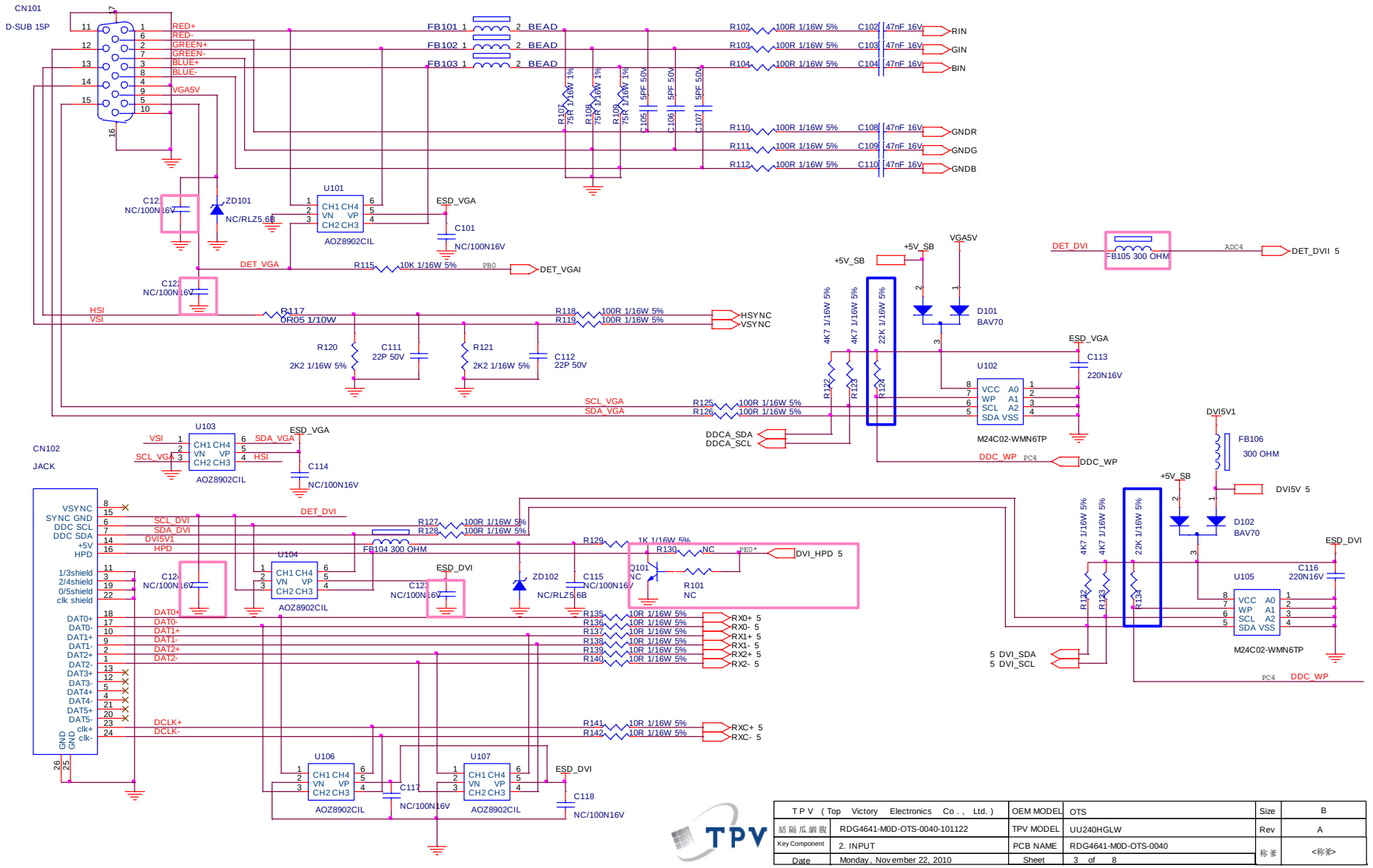


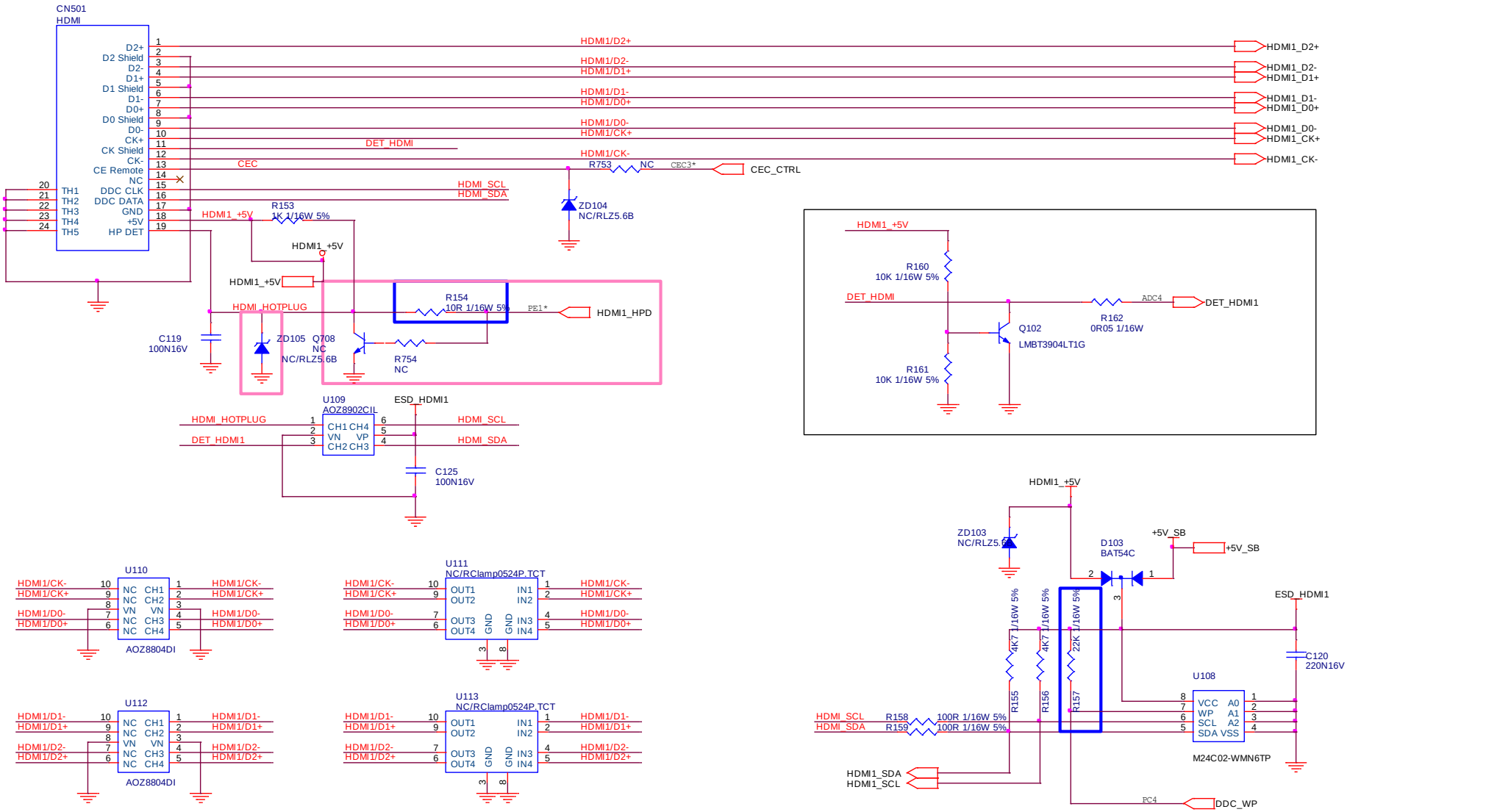


6. Schematic

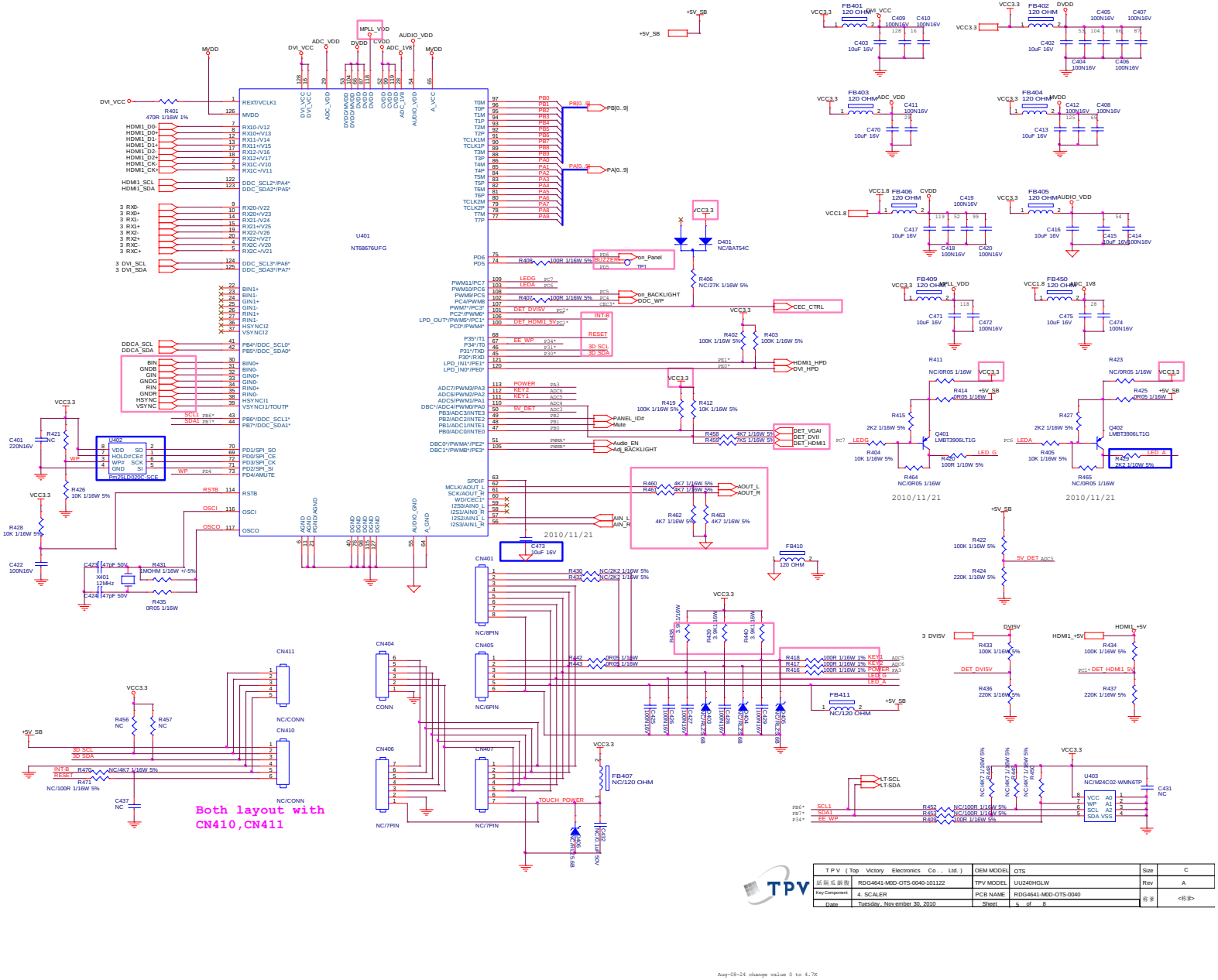
6.1 Main Board

715G4641M01000004S

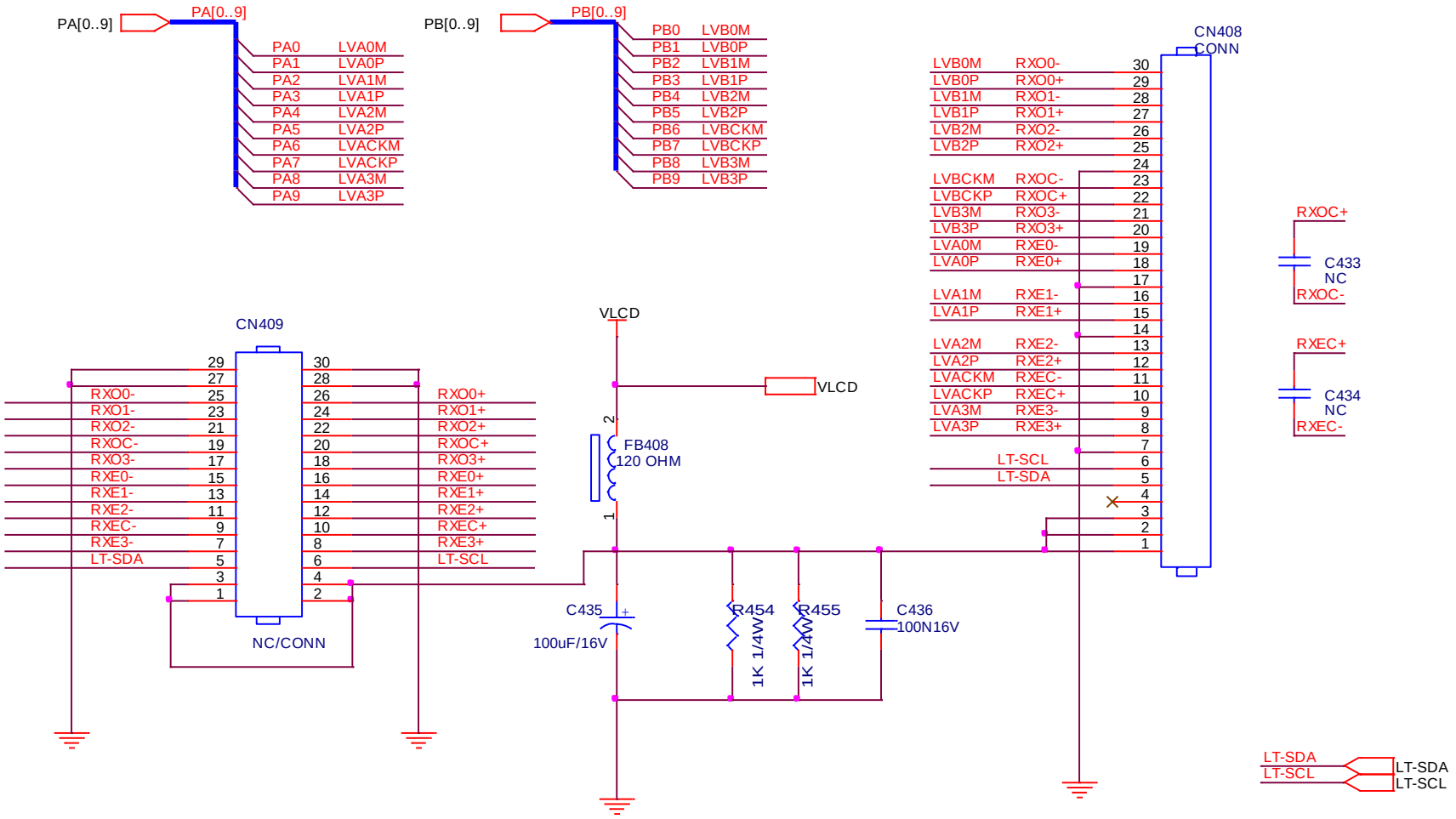




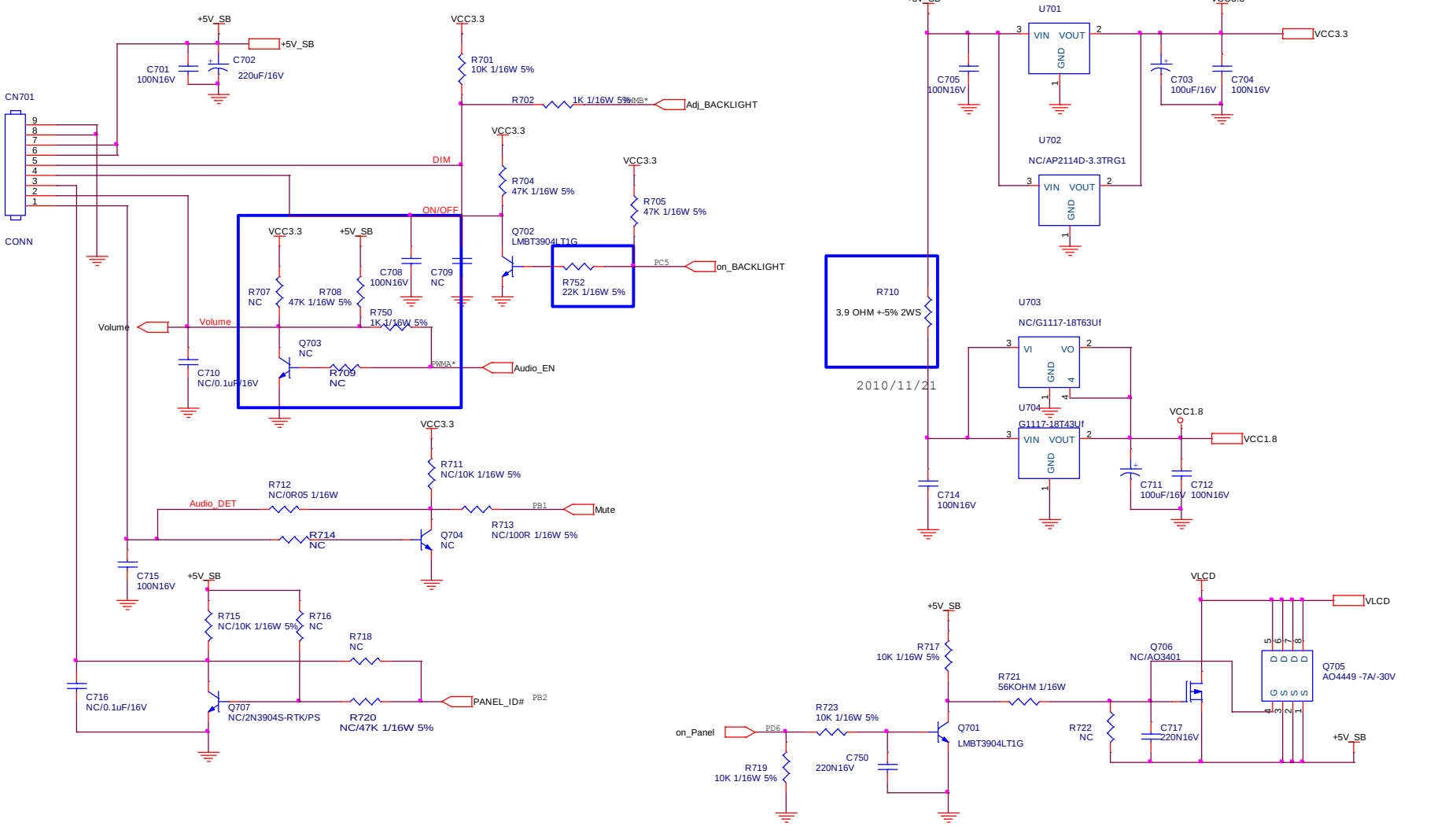
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	OTS	Size	B
紙隔瓜銅腹	RDG4641-M0D-OTS-0040-101122	TPV MODEL	UU240HGLW	Rev	A
Key Component	3. HDMI	PCB NAME	RDG4641-M0D-OTS-0040	称爹	<称爹>
Date	Monday, November 22, 2010	Sheet	4 of 9		



T P V (Top Victory Electronics Co., Ltd.)		OEM MODEL	OTS	Size	C
版 筒 瓜 圖 限	RDG4641-M0D-OTS-0040-101122	TPV MODEL	UU240HGLW	Rev	A
Key Component	4. SCALER	PCB NAME	RDG4641-M0D-OTS-0040		
Date	Tuesday, November 30, 2010	Sheet	5 of 8	标 签	<标签>



T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	OTS	Size	A
結 隔 瓜 綱 腹	RDG4641-M0D-OTS-0040-101122	TPV MODEL	UU240HGLW	Rev	A
Key Component	5. PANEL INTERFACE	PCB NAME	RDG4641-M0D-OTS-0040	称爹	<称爹>
Date	Tuesday, November 30, 2010	Sheet	6 of 8		

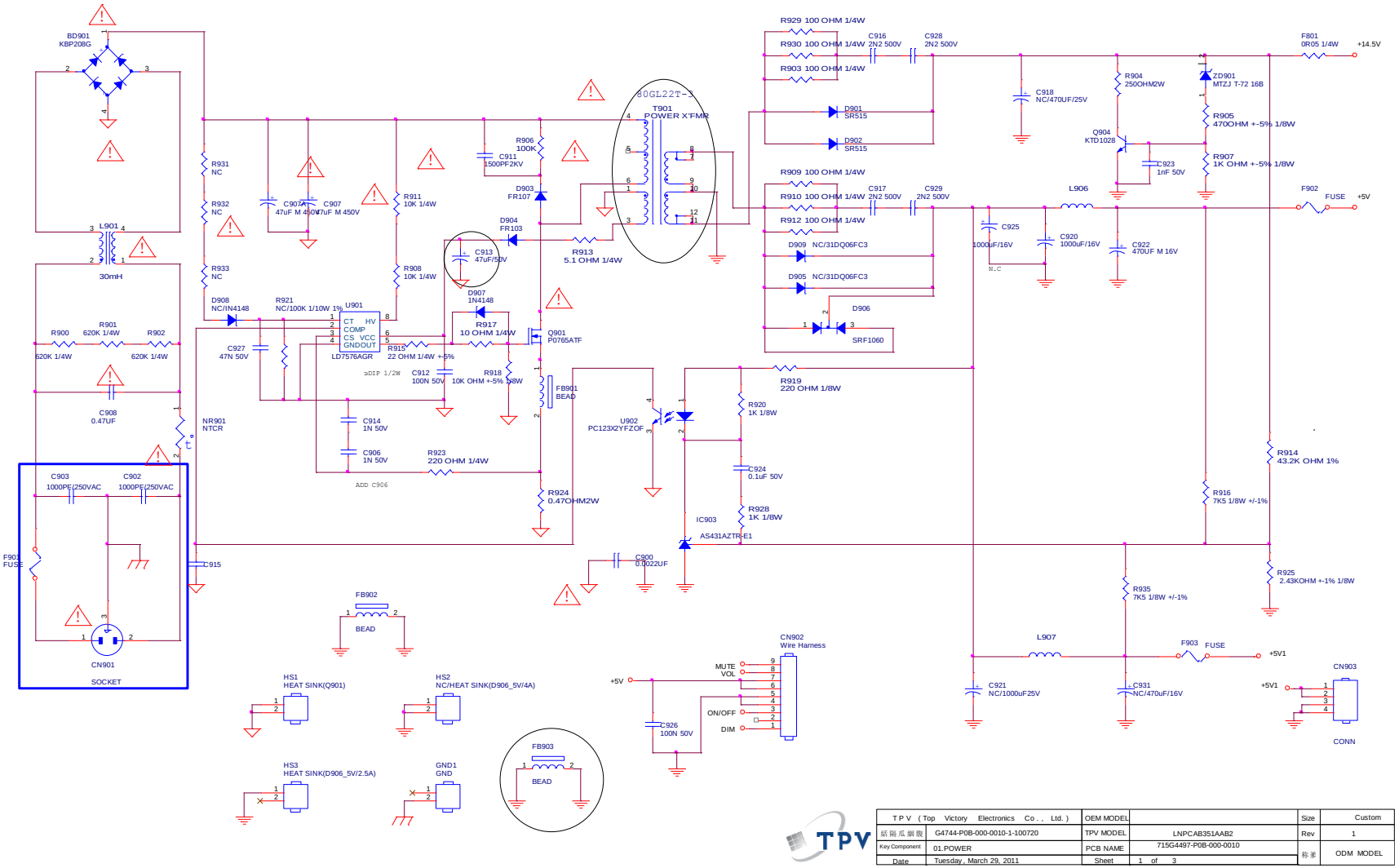


T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	OTS	Size	B
紙隔瓜網腹	RDG4641-M0D-OTS-0040-101122	TPV MODEL	UU240HGLW	Rev	A
Key Component	7. POWER	PCB NAME	RDG4641-M0D-OTS-0040	称爹	<称爹>
Date	Tuesday , Nov ember 30, 2010	Sheet	8 of 8		

6.2 Power Board

Adapter

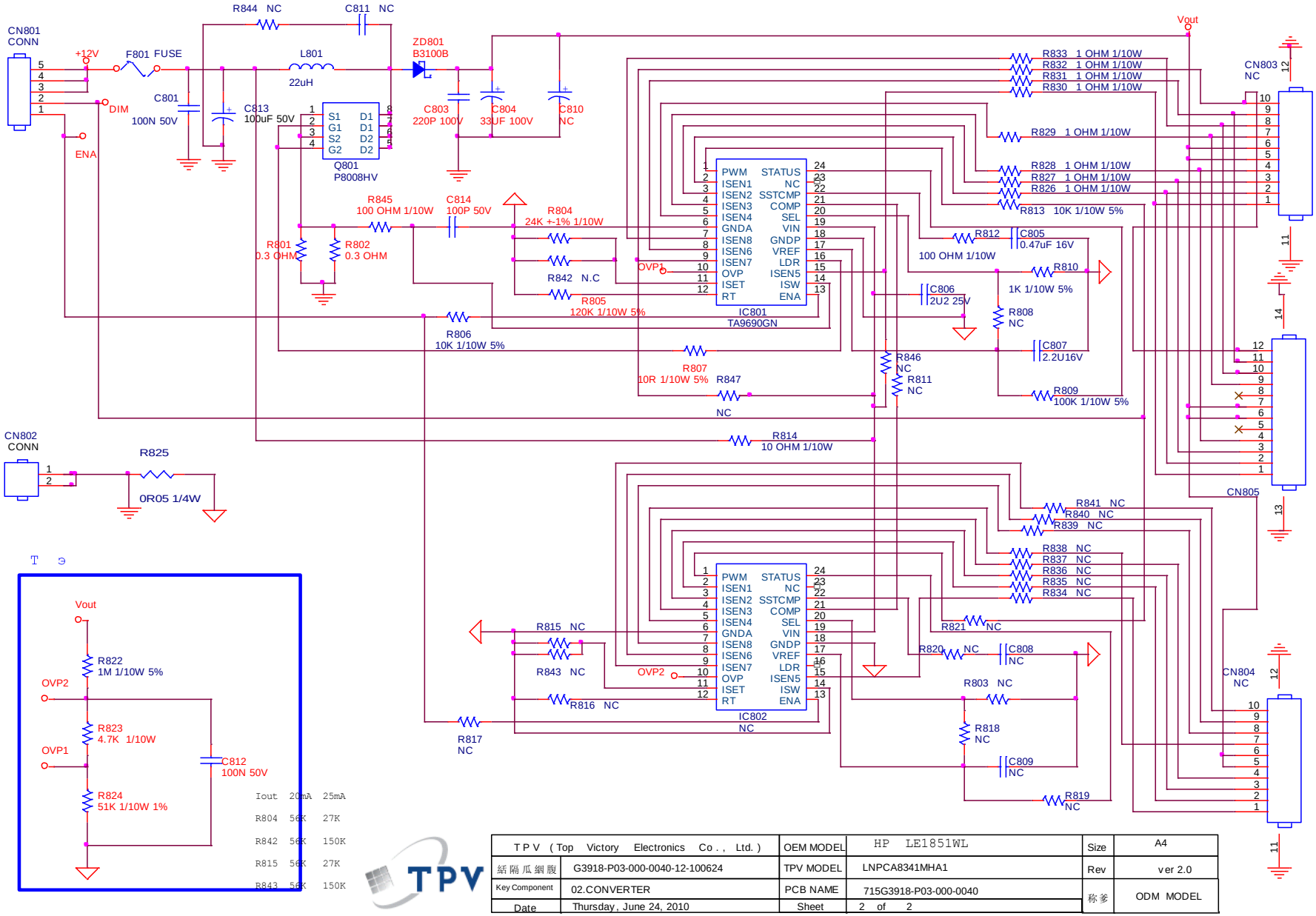
715G4744P01003001M



T P V (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	Custom
話陽瓜鋼股	G4744-P0B-000-0010-1-100720	TPV MODEL	LNPCAB351AAB2	Rev	1
Key Component	01.POWER	PCB NAME	715G4497-P0B-000-0010	称要	ODM MODEL
Date	Tuesday, March 29, 2011	Sheet	1 of 3		

Converter

715G3918P03000004C

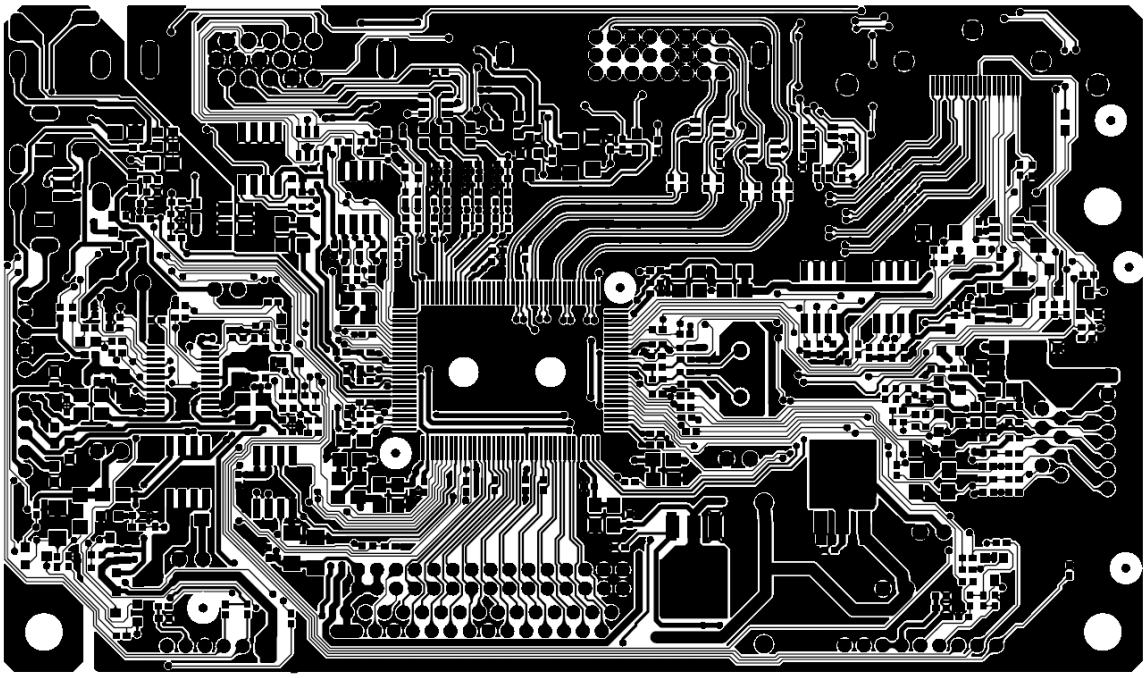


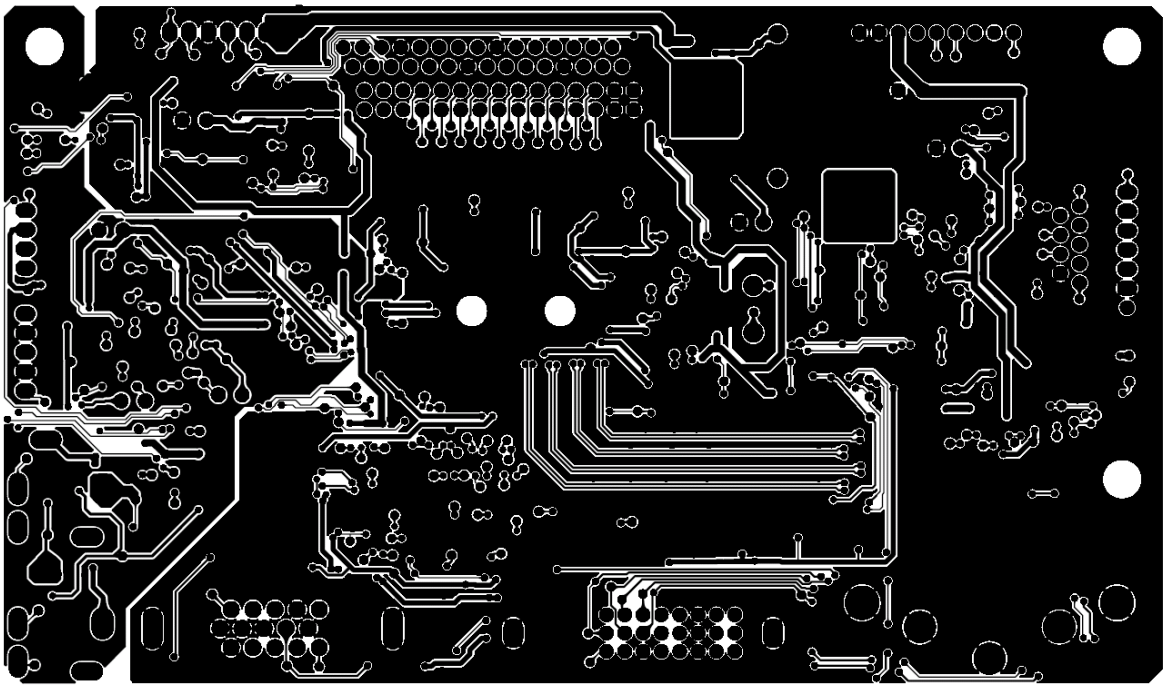
T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	HP LE1851WL	Size	A4
結 隔 瓜 網 腹	G3918-P03-000-0040-12-100624	TPV MODEL	LNPCA8341MHA1	Rev	ver 2.0
Key Component	02.CONVERTER	PCB NAME	715G3918-P03-000-0040	称 爹	ODM MODEL
Date	Thursday , June 24, 2010	Sheet	2 of 2		

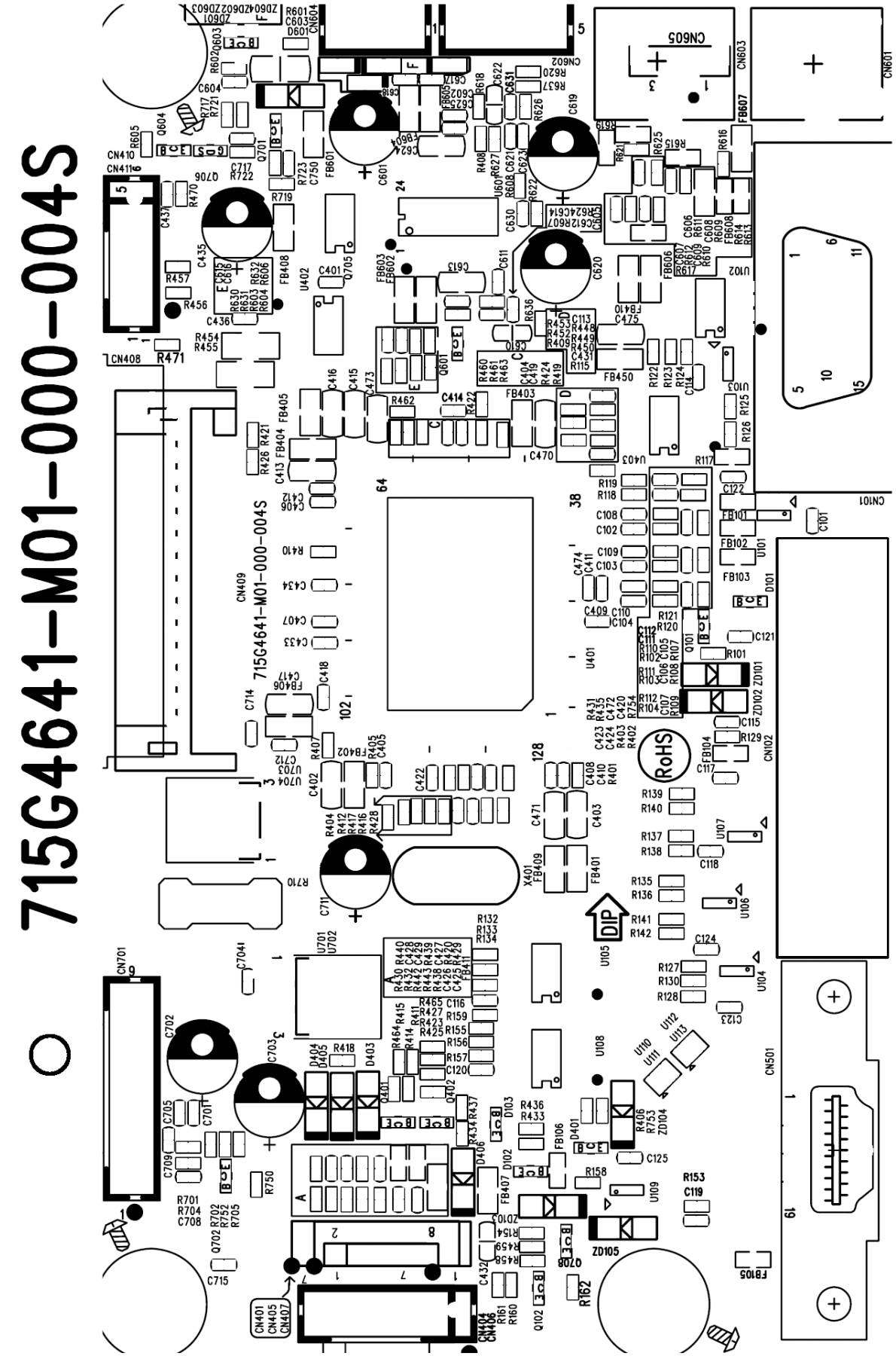
7. PCB Layout

7.1 Main Board

715G4641M01000004S



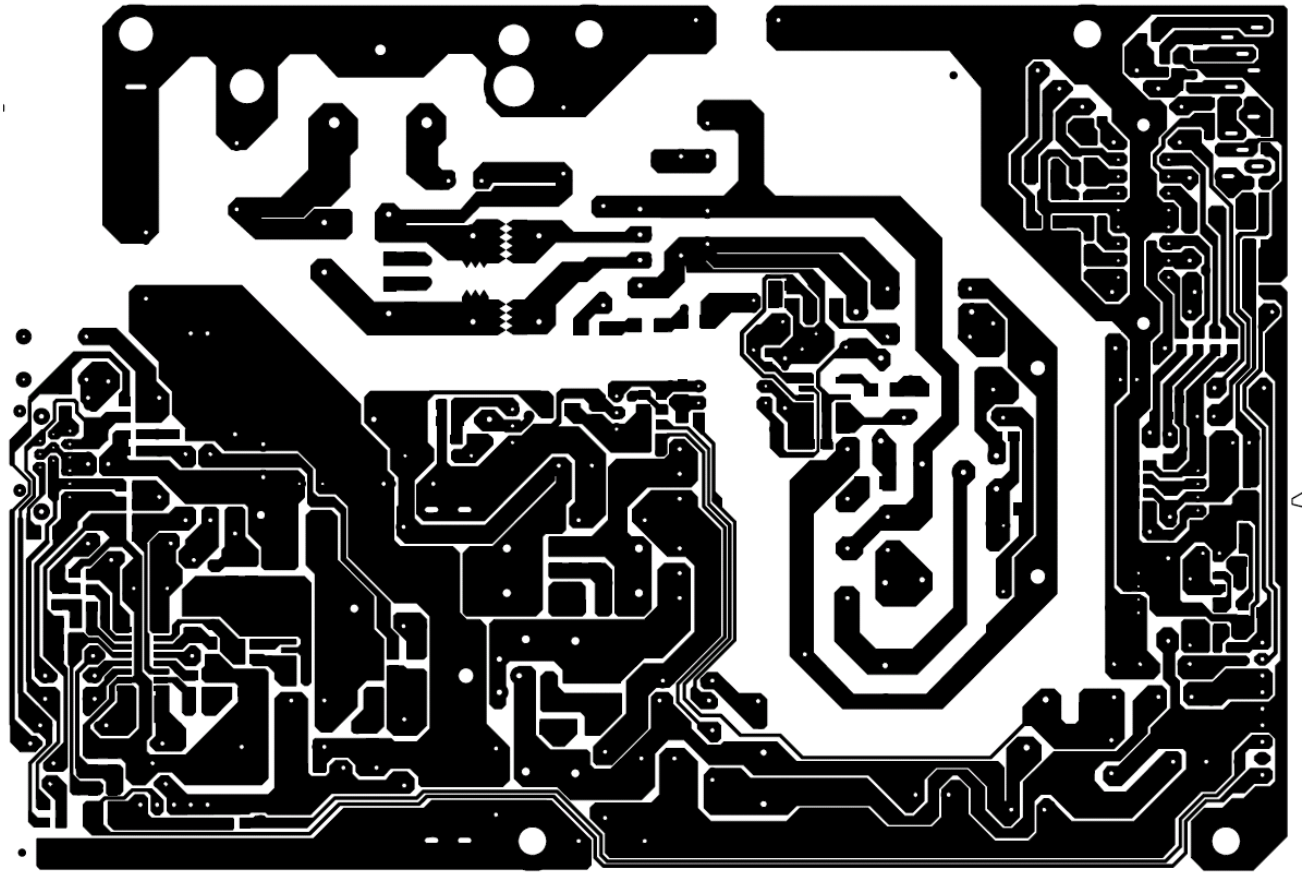


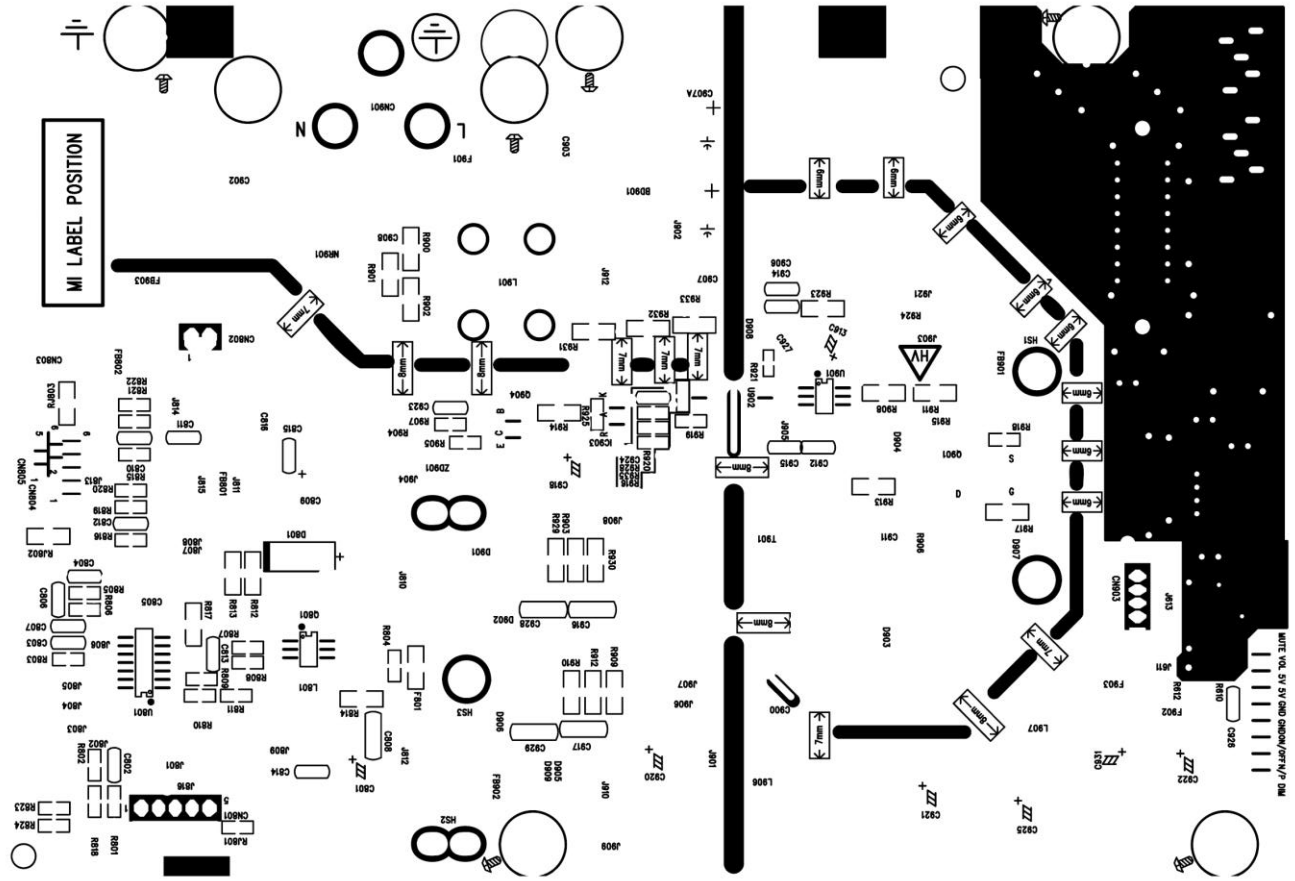

715G4641-M01-000-004S

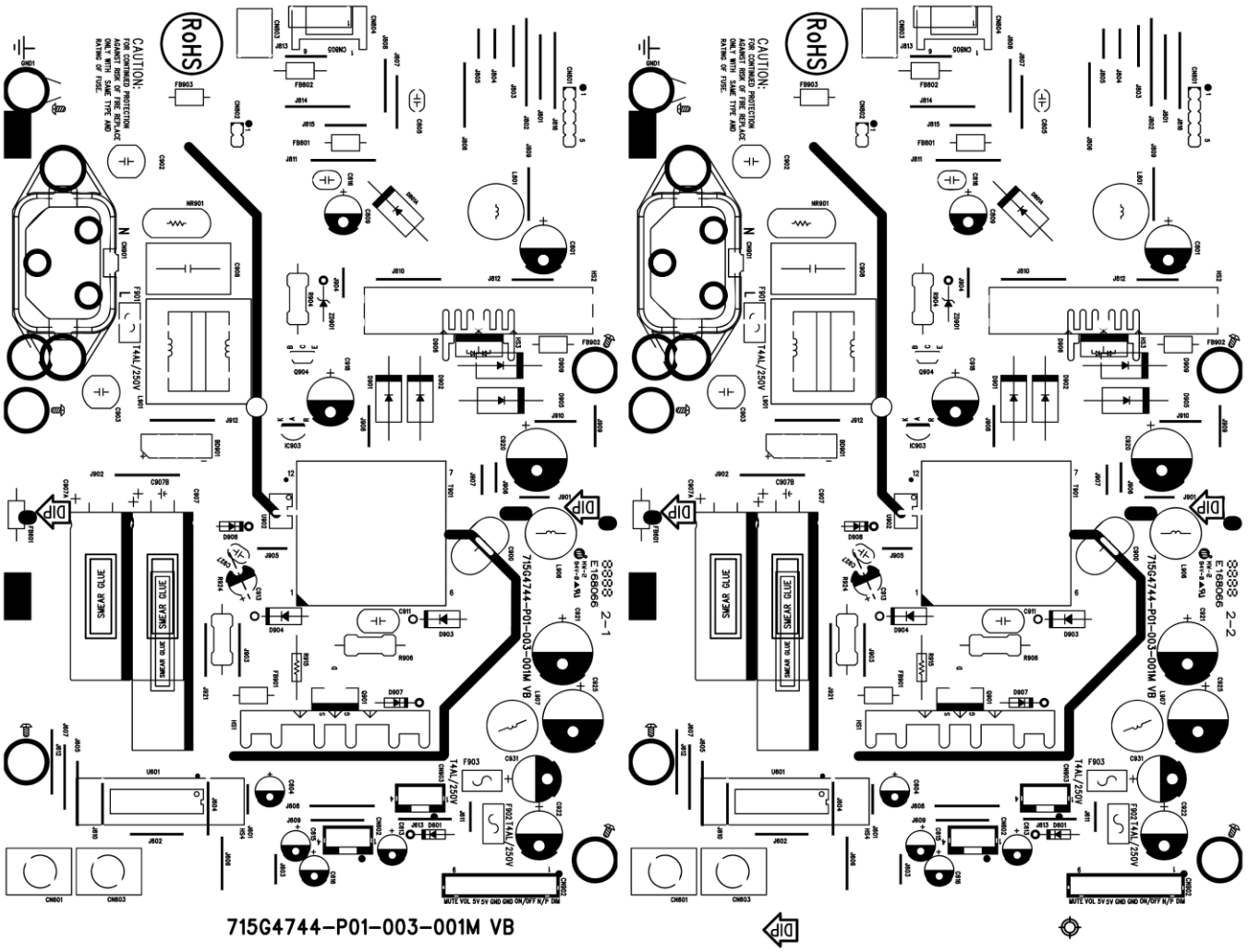
7.2 Power Board

Adapter

715G4744P01003001M

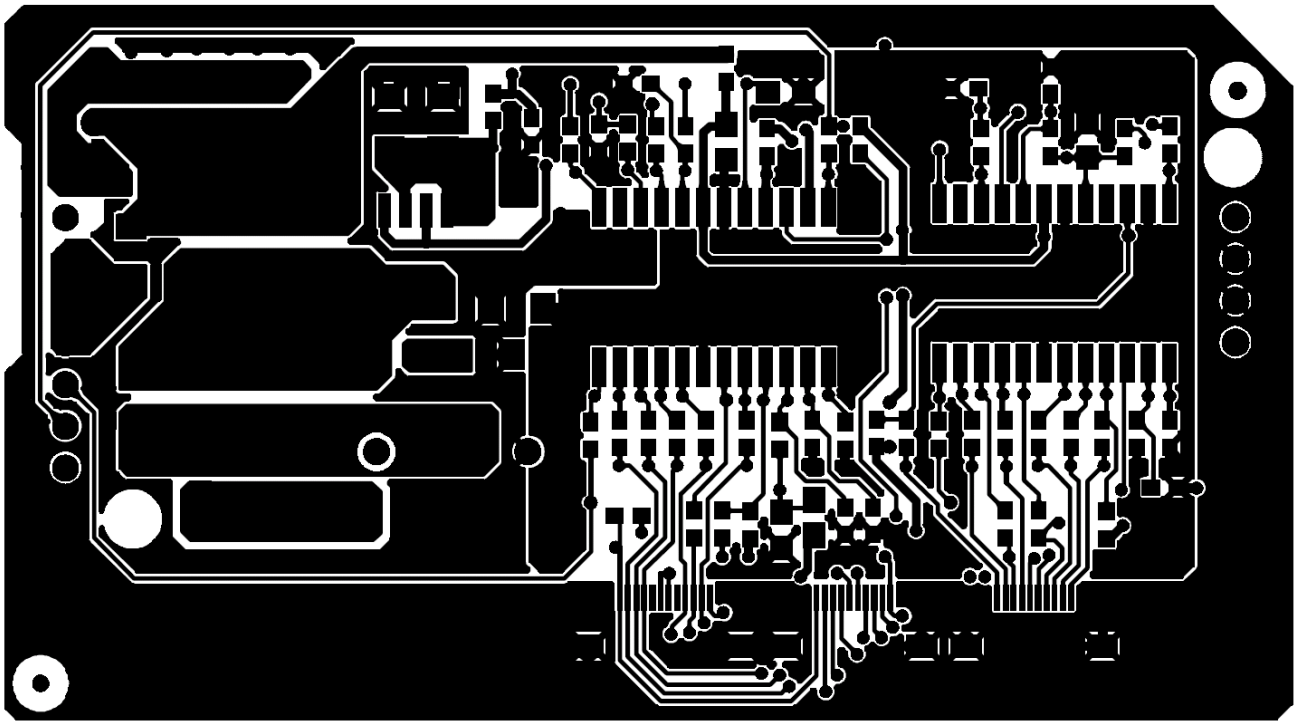


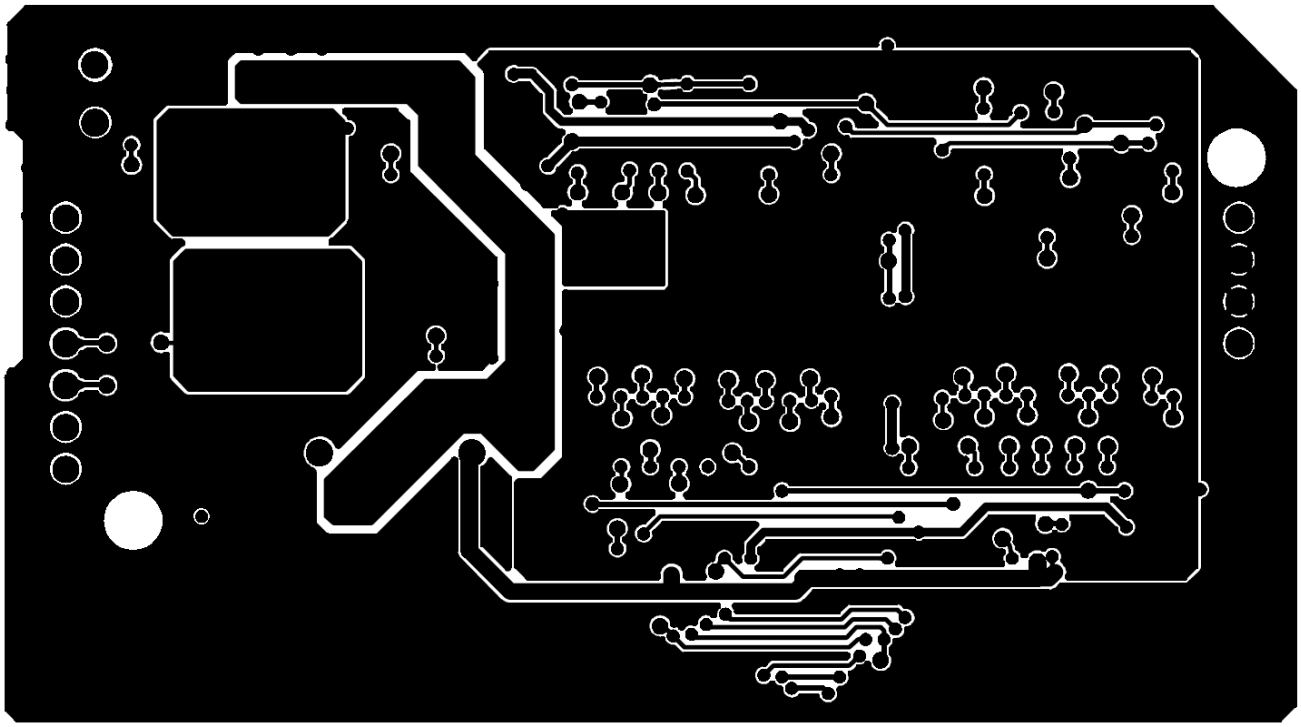


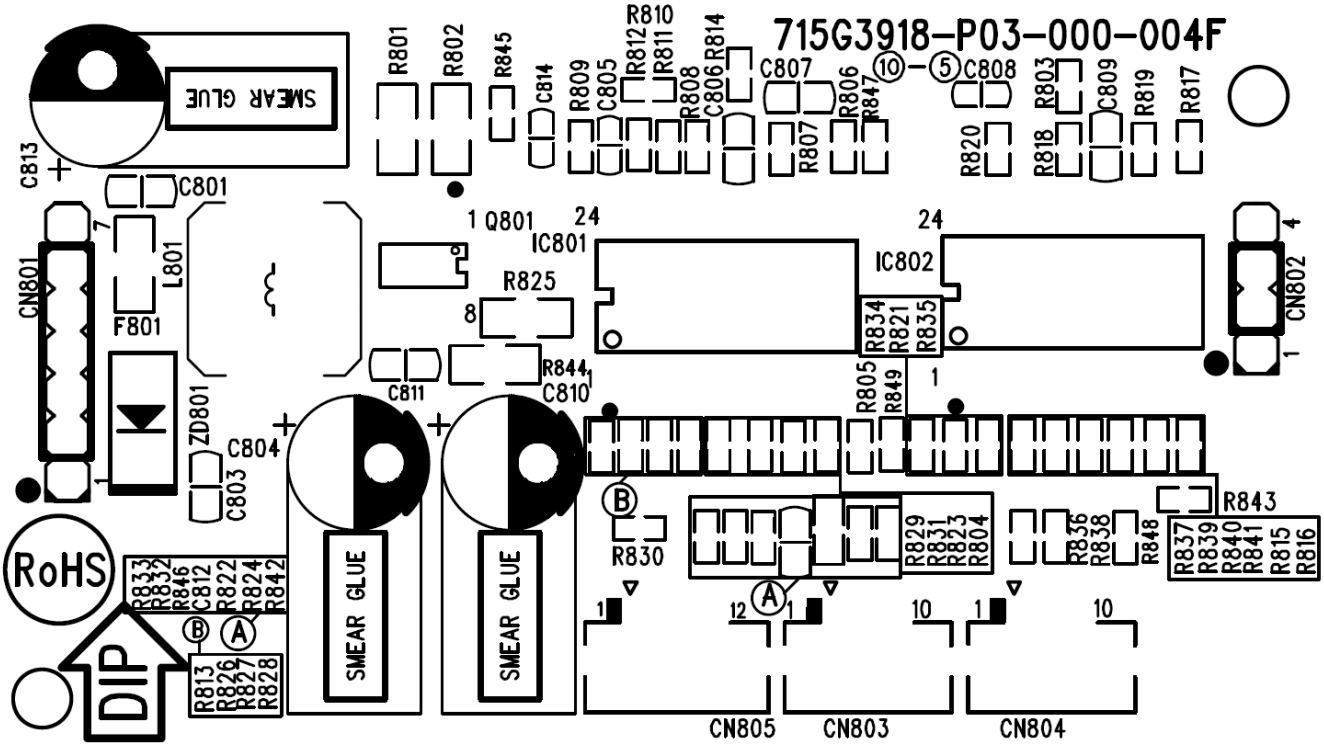


Converter

715G3918P03000004C

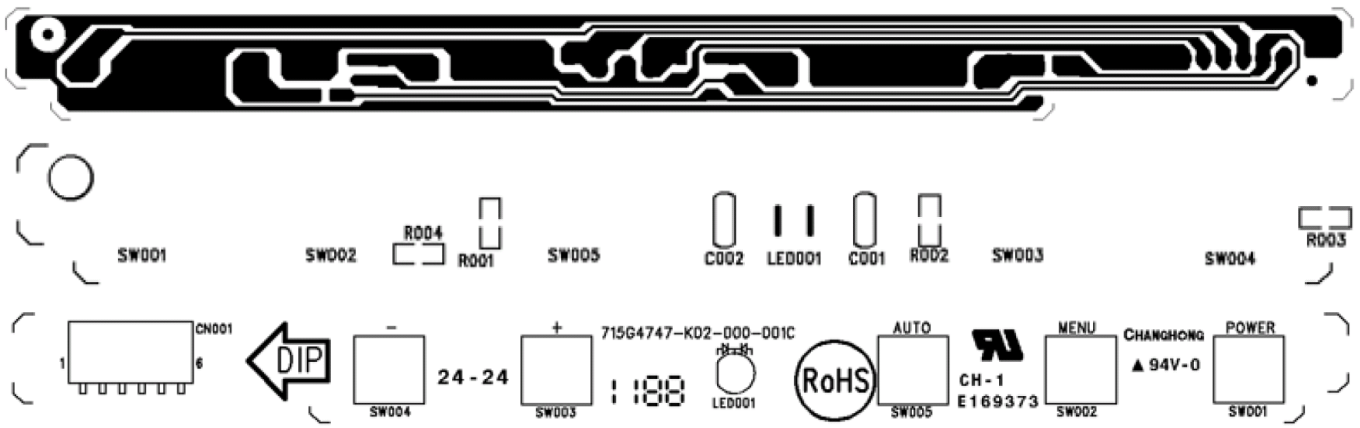





715G3918-P03-000-004F
SMEAR GLUE
C813
C801
CN801
L801
F801
ZD801
C803
C804
C811
C810
R844
R825
Q801
IC801
IC802
R801
R802
R845
C814
R809
C805
R812
R811
R810
R808
C806
R814
C807
R807
R806
R847
C808
R820
R803
R818
C809
R819
R817
CN802
R834
R821
R835
R805
R849
R830
R829
R831
R823
R804
R836
R838
R848
R843
R837
R839
R840
R841
R815
R816
RoHS
DIP
R833
R832
R846
C812
R822
R824
R842
R813
R826
R827
R828
SMEAR GLUE
SMEAR GLUE
CN805
CN803
CN804

7.3 Key Board

715G4747K02000001C



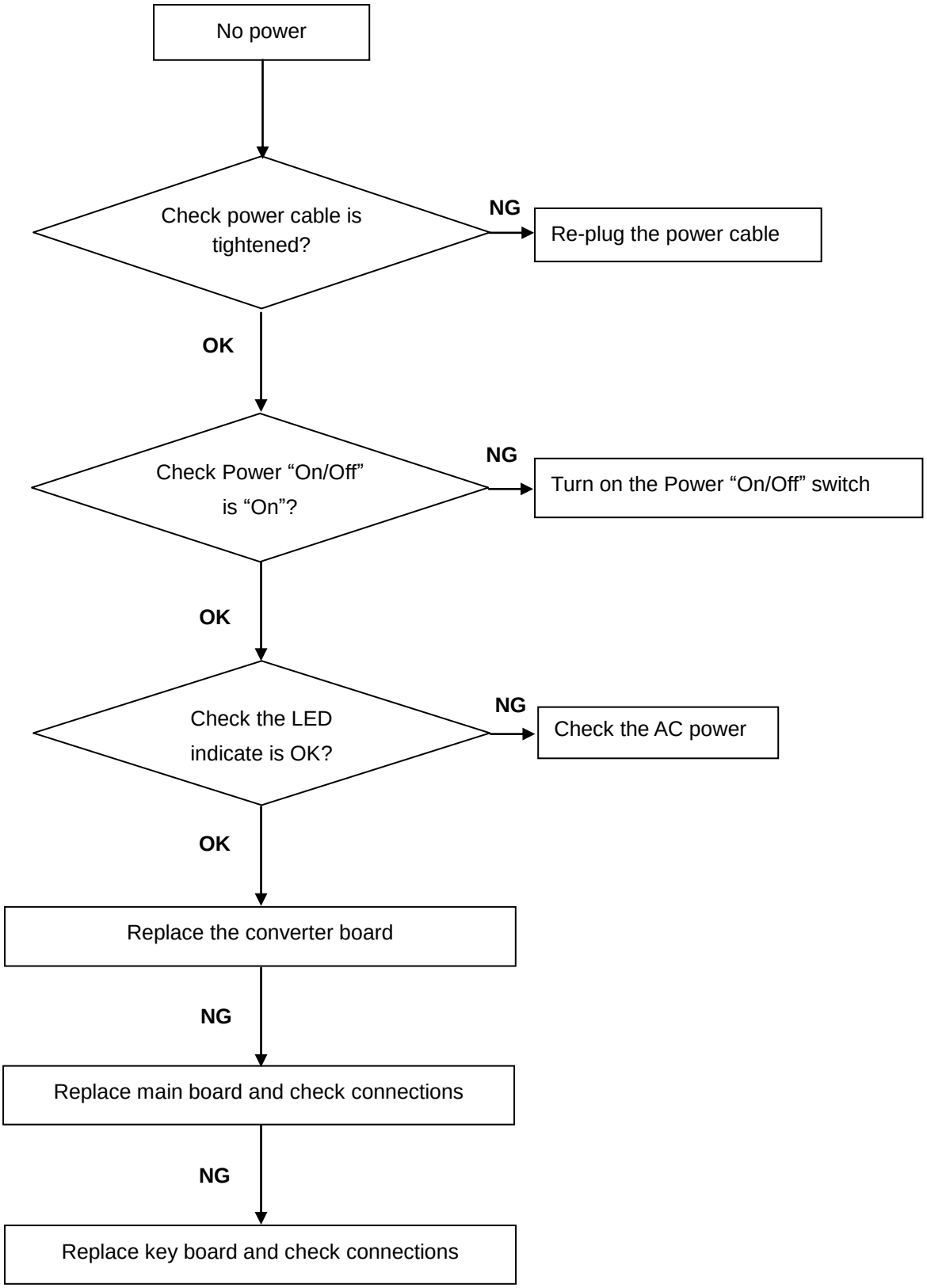
8. Maintainability

8.1 Equipments and Tools Requirement

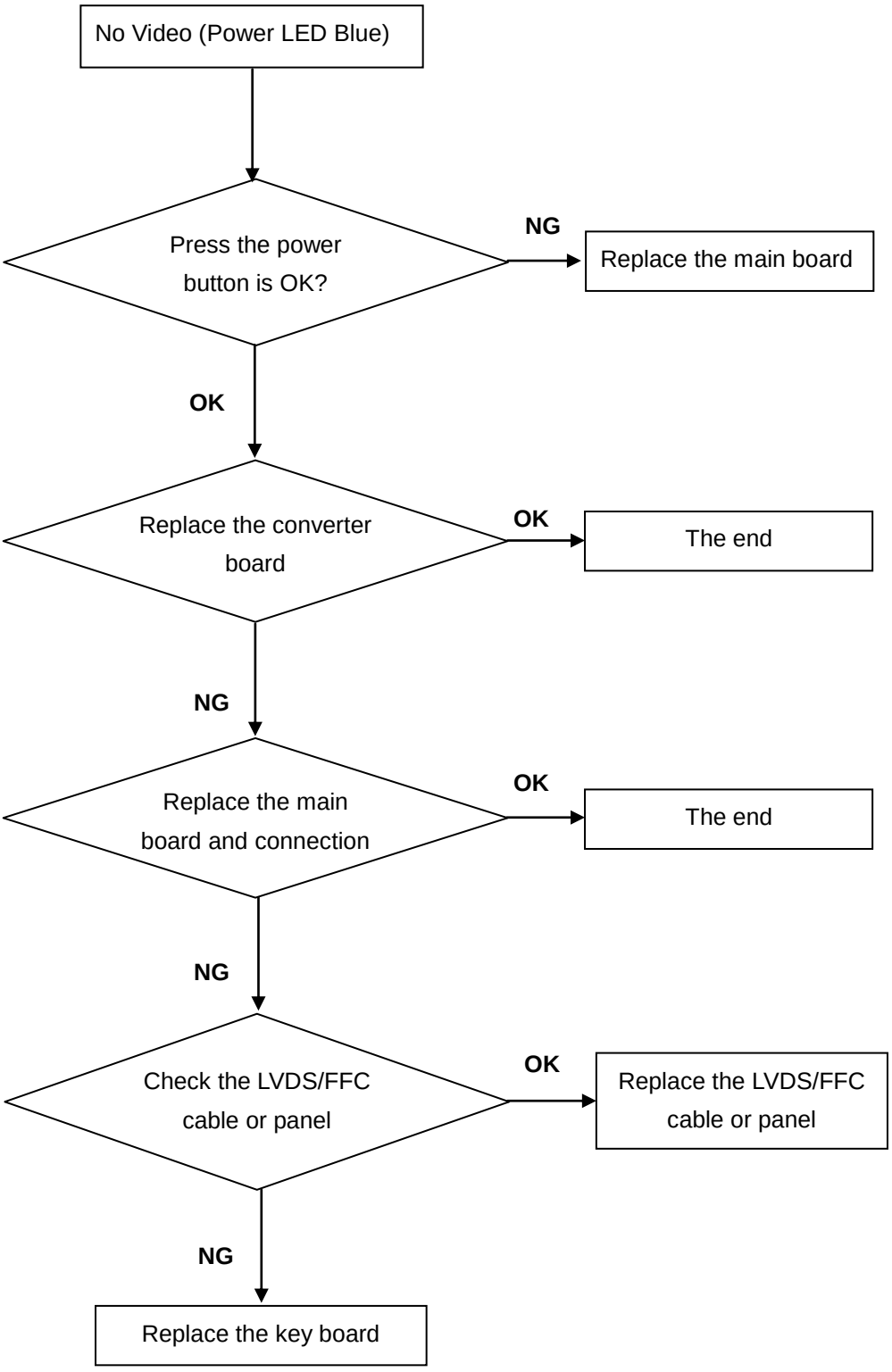
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

8.2 Trouble Shooting

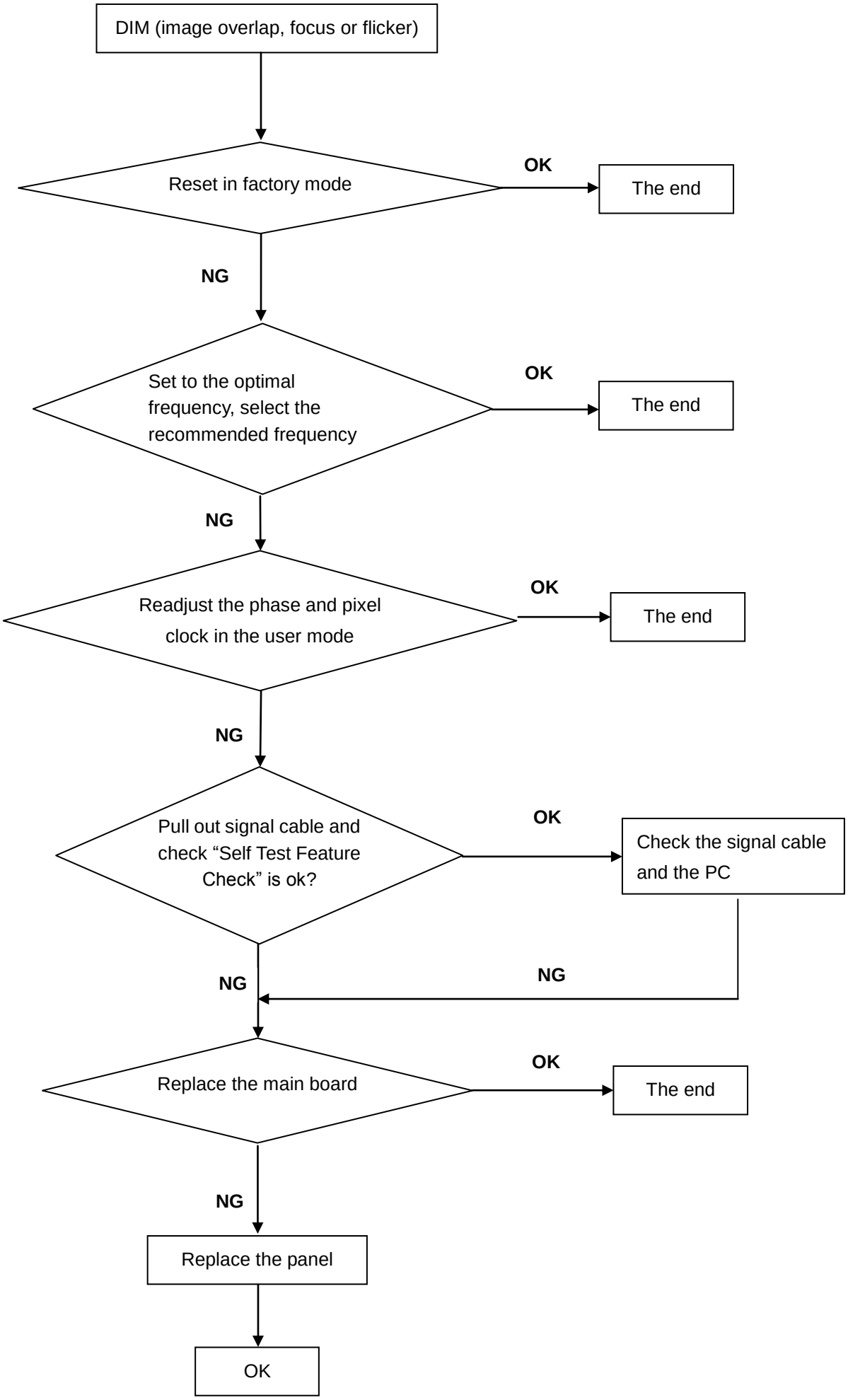
No Power



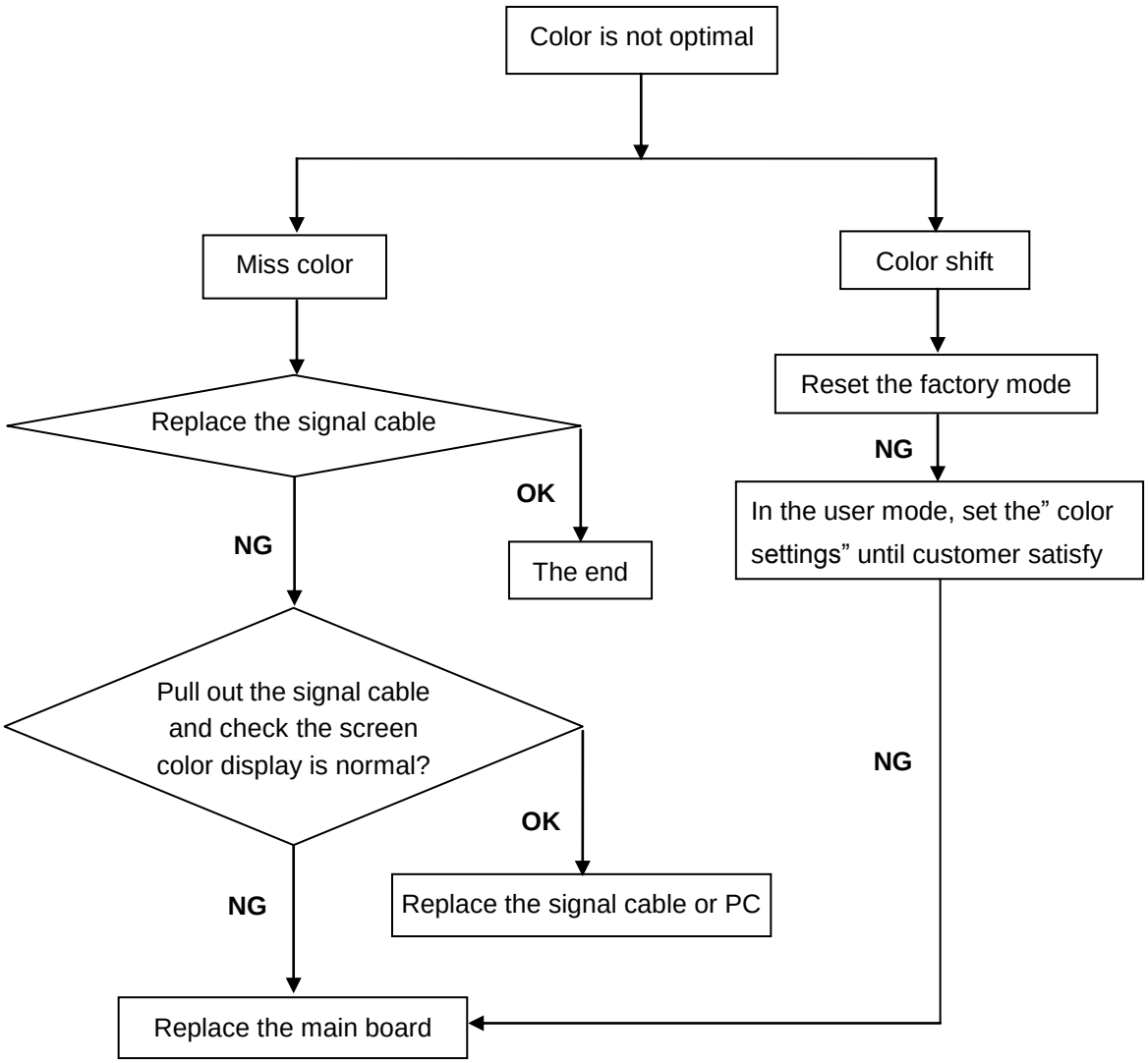
2. No Video (Power LED Blue)



3. DIM


DIM (image overlap, focus or flicker)
Reset in factory mode
OK
The end
NG
Set to the optimal frequency, select the recommended frequency
OK
The end
NG
Readjust the phase and pixel clock in the user mode
OK
The end
NG
Pull out signal cable and check “Self Test Feature Check” is ok?
OK
Check the signal cable and the PC
NG
NG
Replace the main board
OK
The end
NG
Replace the panel
OK

4. Color is not optimal



9.White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding white balance adjustment.
How to setting MEM channel you can reference to chroma 7120 user guide or simple use “SC” key and “NEXT” Key to modify xyY value and use “ID” key to modify the TEXT description Following is the procedure to do white-balance adjust .

1. Setting the color temp.

A. 6500K:

Warm color temp. parameter is x=313±20， y=329±20

B. 7300K

Normal color temp. parameter is x=302±20， y=318±20

C. 9300K

Cool color temp. parameter is x=283±20，y=297±20

D. sRGB

sRGB color temp. parameter is x=313±20， y=329±20

2. Enter into the factory mode:

Press the MENU button,Pull out the power cord, then plug the power cord. Then the factory OSD will be at the left top of the panel.

3. Biase adjustment:

Set the Contrast to 50; Adjust the Brightness to 90.

4. Gain adjustment:

A. Adjust Warm (6500K) color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press “MODE” button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x=313±20， y=329±20
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

B. Adjust Normal (7300K) color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press “MODE” button)
2. Switch the MEM.channel to Channel 4(with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x=302±20， y=318±20
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

C. Adjust Cool (9300K) color-temperature

1. Switch the Chroma-7120 to RGB-Mode (with press “MODE” button)

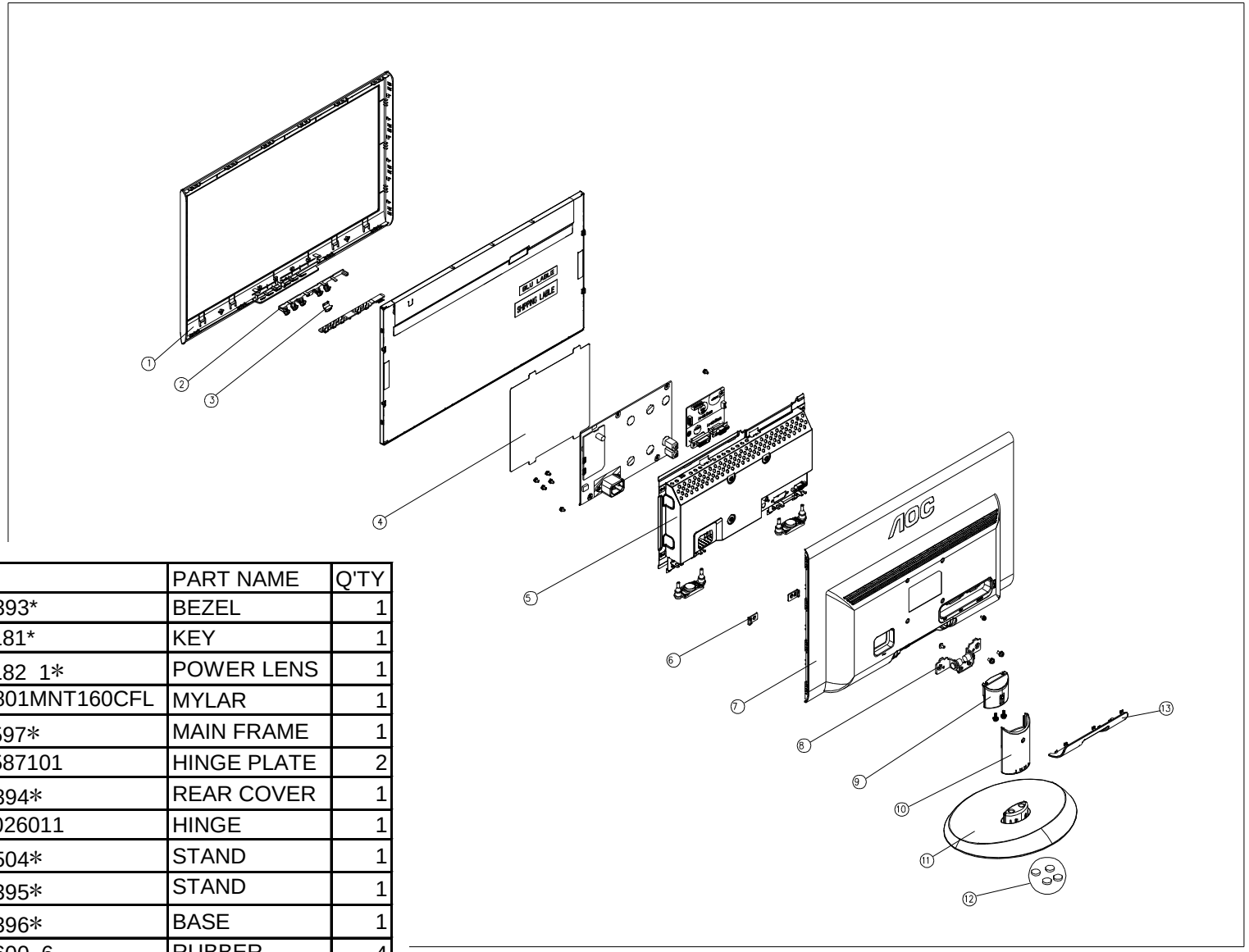
2. Switch the MEM. Channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x=283±20，y=297±20
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

D. Adjust sRGB color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press “MODE” button)
2. Switch the MEM.channel to Channel 10 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x=313±20， y=329±20
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

E. Turn the Power-button off to quit from factory mode.

10. Monitor Exploded Views



NO	P/N	PART NAME	Q'TY
1	Q34G7393*	BEZEL	1
2	A33G1181*	KEY	1
3	A33G1182_1*	POWER LENS	1
4	Q52G1801MNT160CFL	MYLAR	1
5	A15G1597*	MAIN FRAME	1
6	A15G1587101	HINGE PLATE	2
7	Q34G7394*	REAR COVER	1
8	H37G0026011	HINGE	1
9	Q33G0504*	STAND	1
10	Q34G7395*	STAND	1
11	Q34G7396*	BASE	1
12	Q12G6600_6	RUBBER	4
13	Q33G0505*	HINGE COVER	1

11. BOM List

Note: The parts information listed below are for reference only, and are subject to change without notice. Please go to http://cs.tpv.com.cn/hello1.asp for the latest information.

HDBMNZNEAHA1DNE

Location	Part No.	Description	Remark
	052G 2191 A	PAPER TAPE	
HDCP-SMT	070GHDCP500HDC	HDCP CODE	
E07801	078G025A 3 VA	SPEAKER 4 OHM 2.5W 40*20 490+230 NO	
	0D1G1030 6120	screw	
	0M1G 930 8 47 CR3	SCREW 3x8	
	0M1G1140 8120	SCREW 4x8	
	0Q1G 140 12120	SCREW 4X12	
	0Q1G 330 10120	SCREW FOR FP/RC 42-D003792	
E750	750GBM2363A312N000	LCD M236H3-LA3 C1(CC) NB CMI	
E750	750GBM2363A322N000	LCD M236H3-LA3 C2(66) NB CMI	2nd source
	A15G1587101	BKT_HINGE	
	A15G1597301504	MAINFRAME	
	A33G1181ABJ 1L0100	KEY	
	A33G1182 1 1L0100	LENS_POWER	
	A34G2558AEDW1B0105	BEZEL	
	A34G2559ABJ03K0100	REAR_COVER	
	ADPCB1603HF1	ADAPTER BOARD	
	AM1G1740 10125	SCREW	
	AM1G1740 12125	SCREW	
	H37G0026012	HINGE	
	H40G 45762413B	P/N LABEL FOR BASE	
	H44GD015101	CUSHION	
	H44GD015201	CUSHION	
	H44GD015615 3B	ARTWORK CARTON e2450Swh	
	H70G21C161511A	CD MANUAL for 50s all Models	
	KEPCBHA5	KEY BOARD	
	Q33G0504ABJ 1B0100	STAND_TOP	
	Q33G0505ABJ 1L0100	COVER_HINGE	
	Q34G7395ABJ 1B0100	STAND	
	Q34G7396AED 1B0130	BASE	
	Q45G8801M08A0100BX	MANUAL PE BAG	
	Q45G990161940900BX	PROTECT BAG	
	Q50G 4 10	TIE (Y1900221)	
M05201	Q52G100202500A00JY	AL FOIL	
M05202	Q52G100204500A00JY	AL FOIL	
M05203	Q52G100204500A00JY	AL FOIL	
	Q52G1301024A0100YY	BIG CARTON TAPE FOR AOC 60MM	
	Q52G1801MNT160CFLT	INSULATING SHEET	
	Q52G6019 14	TAPE	

E09504	S95G176T12W01	FFC CABLE 224MM 12P 0.5MM	
E09501	S95G179T30PE40	FFC CABLE 30P 217mm 1.0MM	
	040G 58162461A	EPA LABEL	
	756GHBCB A5005	MAIN BOARD-CBPCBNZA1H1	
SMTCB-U402	100GANMD003W11	MCU ASS'Y-056G2233501	
	808GE2450SWHAUS	E2450SWH Australia ASS'Y	
E08904	089G 173 56 4B	AUDIO CABLE	
E08902	089G 715GAAE01	SIGNAL CABLE	
E08901	089G412A15NIS3	AC POWER CORD 1500mm	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 24N61546A	e2450Swh id label PRC	
	Q41G78D161528A	AOC AP WARRANTY CARD	
	808GE2450SWHCIS	E2450SWH CIS(中亚) ASS'Y	
	026G 800504 H	BAR CODE LABEL	
E08904	089G 173 56 4B	AUDIO CABLE	
E08909	089G 184HAA500	HDMI CABLE 1800mm	
E08902	089G 715GAAE01	SIGNAL CABLE	
E08903	089G1745GAA 9	DVI CABLE	
E08901	089G404A15N HL	AC POWER CORD 1500mm	
	H40G 18N61582A	e*50* CIS ID LABEL	
	H40G000261575A	E2450SWH CIS CARTON LABEL	
	Q41G78D161509B	WARRANTY CARD Middle East	
	808GE2450SWHHKG	E2450SWH HongKong ASS'Y	
	089G 173 56 4B	AUDIO CABLE	
E08908	089G 184HAA500	HDMI CABLE 1800mm	
E08902	089G 715GAAE01	SIGNAL CABLE	
E08903	089G1745GAA 9	DVI CABLE	
E08901	089G410A15N HL	AC POWER CORD 1500	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 24N61546A	e2450Swh id label PRC	
	Q41G78D161528A	AOC AP WARRANTY CARD	
	808GE2450SWHINA	E2450SWH Indonesia ASS'Y	
	026G 800504 H	BAR CODE LABEL	
	089G 173 56 4B	AUDIO CABLE	
E08908	089G 184HAA500	HDMI CABLE 1800mm	
E08902	089G 715GAAE01	SIGNAL CABLE	
E08903	089G1745GAA 9	DVI CABLE	
E08901	089G404A15N HL	AC POWER CORD 1500mm	
	H40G 18N61567A	N950WA 印尼 ID label	
	H41G1800615 1B	MANUAL 印尼	
	Q40G000161514A	CARTON LABEL	
	Q41G78D161528A	AOC AP WARRANTY CARD	
	808GE2450SWHPHI	10450SWH Philippines ASS'Y	
	089G 173 56 4B	AUDIO CABLE	
E08908	089G 184HAA500	HDMI CABLE 1800mm	

E08902	089G 715HAAE01	SIGNAL CABLE	
E08903	089G1745HAA 9	DVI CABLE 1.5M	
E08901	089G402A15N HL	AC POWER CORD 1500mm	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 24N61546A	e2450Swh id label PRC	
	Q41G78D161528A	AOC AP WARRANTY CARD	
	808GE2450SWHRSA	E2450SWH South Africa ASS'Y	
	089G 173 56 4B	AUDIO CABLE	
E08908	089G 184HAA500	HDMI CABLE 1800mm	
E08902	089G 715HAAE01	SIGNAL CABLE	
E08903	089G1745HAA 9	DVI CABLE 1.5M	
E08901	089G419A15N IS	AC POWER CORD 1500MM	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 24N61546A	e2450Swh id label PRC	
	Q41G78D161509B	WARRANTY CARD Middle East	
	808GE2450SWHTHA	E2450SWH Thailand ASS'Y	
	089G 173 56 4B	AUDIO CABLE	
E08908	089G 184HAA500	HDMI CABLE 1800mm	
E08902	089G 715HAAE01	SIGNAL CABLE	
E08903	089G1745HAA 9	DVI CABLE 1.5M	
E08901	089G402A15N HL	AC POWER CORD 1500mm	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 24N61546A	e2450Swh id label PRC	
	Q41G78D161528A	AOC AP WARRANTY CARD	
	808GE2450SWHTPE	E2450SWH Chinese Taipei ASS'Y	
E08904	089G 173 56 4B	AUDIO CABLE	
E08908	089G 184HAA500	HDMI CABLE 1800mm	
E08902	089G 715GAAE01	SIGNAL CABLE	
E08903	089G1745GAA 9	DVI CABLE	
E08901	089G420A15N IS	AC POWER CORD 1500MM TAIWAN	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 22N61580A	e2250Swd TW ID LABEL	
	Q41G78D161528A	AOC AP WARRANTY CARD	
	808GE2450SWHUAE	E2450SWH United Arab Emirates ASS'Y	
	089G 173 56 4B	AUDIO CABLE	
E08908	089G 184HAA500	HDMI CABLE 1800mm	
E08902	089G 715GAAE01	SIGNAL CABLE	
E08903	089G1745GAA 9	DVI CABLE	
E08901	089G404A15N HL	AC POWER CORD 1500mm	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 24N61546A	e2450Swh id label PRC	
	Q41G78D161509B	WARRANTY CARD Middle East	
	808GE2450SWHVIE	E2450SWH Vietnam ASS'Y	
	089G 173 56 4B	AUDIO CABLE	
E08908	089G 184HAA500	HDMI CABLE 1800mm	

E08902	089G 715GAAE01	SIGNAL CABLE	
E08903	089G1745GAA 9	DVI CABLE	
E08901	089G404A15N HL	AC POWER CORD 1500mm	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 24N61546A	e2450Swh id label PRC	
	Q41G78D161528A	AOC AP WARRANTY CARD	
GND1	009G6005 1	GND TERMINAL	
U902	056G 139 9	IC EL817M(X) photocoupler DIP-4	
NR901	061G 5810X	NTCR 8R 20% 4W 8D2-14 MCS	
C908	063G107K474 6S	0.47UF +-10%	
C907A	067G 40Z47015K	EC 47UF 20% 450V 12.5*35	
C907	067G 40Z47015K	EC 47UF 20% 450V 12.5*35	
L901	073G 174 65 X2	LINE FILTER 30mH MIN	
L906	073G 253191 H	IND CHOKE 1.1uH DADON	
T901	080GL22T 3 N3	X'FMR 490UH 7% 4UH YUVA-1656	
CN901	087G 501 48 DL	AC SOCKET 3PIN + 3 Hole	
BD901	093G 50460514	BRIDGE KBP306G-05 3A 800V KBP	
D901	093G 60335	DIODE SR515 5A/150V DO-201AD	
D905	093G 60519	DIODE SR560-MK23 5A/60V DO-27 SECOS	
D909	093G 60519	DIODE SR560-MK23 5A/60V DO-27 SECOS	
CN902	095G 825 9D905	HARNESS 9P(SCN) - 9P 80mm FQE100911I	
	0Q1G 340 8140	SCREW Q1-SELF TAPING SCREW :Q x8.0	
	705GHA57006	Q901 ASS"Y	
	709G4744 HM001	CONSUMPTIVE ASS'Y	
	H40G 45762429A	LABEL	
	LNPCAD321HD2	CONVERTER BOARD	
CN604	033G3802 4B Y L	CONNECTOR 4P 2.0	
CN404	033G3802 6B Y L	WAFER	
CN701	033G3802 9B Y L	CONN 2.0 9P	
CN408	033G801930F CH JS	FFC CONN 1.0mm 30P R/A 34mm 6.3mm	
R710	061G152M47964B SY	RST MOF 4R7 5% 2W RSS02J4R70C150NH	
C703	067G315M1013HV	EC 100UF 20% 16V 6.3*7	
C711	067G315M1013HV	EC 100UF 20% 16V 6.3*7	
C435	067G315M1013HV	EC 100UF 20% 16V 6.3*7	
C601	067G315M2213HV	EC 220UF 20% 16V 6.3*7	
C702	067G315M2213HV	EC 220UF 20% 16V 6.3*7	
CN601	088G 30254C	PHONE JACK 3.5mm 5P V/T GREEN	
CN101	088G 35315FVXH	D-SUB CONN V/T 15P BLUE 1*1 V/T 30.8	
CN102	088G 35424FVXH	DVI CONN V/T 24P WHITE	
U401	090G6250 1 GP	HEAT SINK	
X401	093G 2251B J	CRYSTAL 12MHZ NXS12.000AC30F-KAB10	
	709G46410HM001	COMSUMPTIVE ASSY	
	H40G 45762429A	LABEL	
LED001	081G 12 1F GH	LED GREEN/YELLOW GHZYG603D2-5B	
CN001	095G820H 6WW01	HARNESS 6P-6P(2008) 140	

	709G4747 HM001	COMSUPTIVE ASS'Y	
Q901	057G 667941	MOSFET P0765ATF 7 650 TO-220F	
HS1	090G6064 1	HEAT SINK	
	0M1G 930 8120	SCREW 3x8	
	055G 23524	WELDING FLUX WITHOUT PB	
	Q51G 6 4509	GLUE_RTV	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
U901	056G 379529	AC/DC CONVERTER IC LD7576AGR SOP-7	
RJ801	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R916	061G08051002FT	RST CHIP 10K 1/8W 1%	
R907	061G0805102 JT	RST CHIPR 1K OHM +- 5% 1/8W TZAI YUAN	
R928	061G0805103 JF	RST CHIPR 10K OHM +-5% 1/8W FENGHUA	
R918	061G0805103 JT	RST 0805 10K 5% 1/8W	
R920	061G0805202 JF	RST CHIPR 2KOHM +-5% 1/8W FENGHUA	
R919	061G0805221 JF	RST CHIPR 220 OHM +-5% 1/8W FENGHUA	
R905	061G0805471 JT	RST CHIPR 470OHM +-5% 1/8W TZAI YUAN	
R925	061G08059101FF	RST CHIPR 9.1KOHM +-1% 1/8W FENGHUA	
F801	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	
R917	061G1206100 JT	RST CHIPR 10 OHM +-5% 1/4W TZAI YUAN	
R930	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R929	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R912	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R910	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R909	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R903	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R911	061G1206103 JF	RST CHIPR 10KOHM +-5% 1/4W FENGHUA	
R908	061G1206103 JT	RST CHIPR 10KOHM +-5% 1/4W TZAI YUAN	
R913	061G1206109 JT	RST CHIPR 1 OHM +-5% 1/4W TZAI YUAN	
R923	061G1206221 JT	RST CHIPR 220 OHM +-5% 1/4W TZAI YUAN	
R901	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
R900	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
R902	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
C923	065G080510232K F	CAP 0805 1000PF 10% 50V X7R	
C906	065G080510232K Y	CAP CHIP 0805 1N 50V X7R +/-10%	
C914	065G080510232K Y	CAP CHIP 0805 1N 50V X7R +/-10%	
C915	065G080510332K Y	CAP CHIP 0805 10N 50V X7R +/-10%	
C924	065G080510432K F	CAP CHIP 0805 0.1UF K 50V X7R	
C926	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C912	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C929	065G120622272K Y	CER 1206 2N2 500V X7R 10%	
C916	065G120622272K Y	CER 1206 2N2 500V X7R 10%	
C917	065G120622272K Y	CER 1206 2N2 500V X7R 10%	
C928	065G120622272K Y	CER 1206 2N2 500V X7R 10%	
	709G4744 HS001	CONSUMPTIVE ASS'Y	
C804	067G 415479 9K	EC 4.7UF 20% 100V ED 8*12	

C813	067G315M1016KV	EC 100UF 20% 35V 8*7	
CN802	311GB254B04AAL	PIN HEADER 2.54mm 4P V/T - 9.16mm	
CN801	311GB254B07AAL	PIN HEADER 2.54MM 7P 5P7.2MM/2P4.0MM	
	H40G 45762429A	LABEL	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
R002	061G0603000 FF	RST CHIPR MAX0R01 1/10W FENGHUA	
R004	061G06031001FF	RST CHIPR 1 KOHM +-1% 1/10W FENGHUA	
R003	061G06032001FF	RST CHIP 2KOHM 1% 1/10W FENGHUA	
R001	061G06032001FF	RST CHIP 2KOHM 1% 1/10W FENGHUA	
D904	093G 6026T52T	CTIFIER DIODE FR107	
D903	093G 6026T52T	CTIFIER DIODE FR107	
CN901	006G 31500	EYELET	
IC903	056G 158 10 T	DC/DC AS431AZTR-E1 150MA 40V TO-92	
Q904	057G 530503 T	2SD1207T	
R915	061G 17222052T TZ	RST CFR 22R 5% 1/4W	
R906	061G152M10452T SY	RST MOFR 100KOHM +-5% 2WS FUTABA	
R904	061G152M25152T SY	RST MOF 250R 5% 2W	
R924	061G152M47852T SY	RST MOFR 0.47 OHM +-5% 2WS FUTABA	
C911	065G 2K152 2T6921	CAP CER 1500pF K 2KV Y5P	
C903	065G305M1023WR	CAP Y2 1NF 20% 250V Y5U	
C902	065G305M1023WR	CAP Y2 1NF 20% 250V Y5U	
C900	065G306M22233R	CAP Y1 2.2NF 20% 250V Y5U	
C927	065G500K4732HT	CAP CER 47NF 10% 50V X7R	
C920	067G 2046812KT	CAP CS 680UF 20% 10V 8*11 3900mA GP1A6	
C913	067G215Y4707KT	EC 47uF 20% 50V 6.3*11mm EG	
FB903	071G 55 29	FERRITE BEAD	
FB902	071G 55 29	FERRITE BEAD	
FB901	071G 55 29	FERRITE BEAD	
F901	084G 56 4 B	FUSE 4A 250V	
F902	084G 56 4 B	FUSE 4A 250V	
ZD901	093G 39A6852T	ZENER MTZJ22B 21.51V 0.5W DO-35	
D907	093G 6452452T	SWITCHING 1N4148-B4006 0.2A 100V DO-35	
J908	095G 90 23	JUMP WIRE - -	
J921	095G 90 23	JUMP WIRE - -	
J910	095G 90 23	JUMP WIRE - -	
J909	095G 90 23	JUMP WIRE - -	
J907	095G 90 23	JUMP WIRE - -	
J906	095G 90 23	JUMP WIRE - -	
J901	095G 90 23	JUMP WIRE - -	
J905	095G 90 23	JUMP WIRE - -	
J904	095G 90 23	JUMP WIRE - -	
J812	095G 90 23	JUMP WIRE - -	
J810	095G 90 23	JUMP WIRE - -	
J903	095G 90 23	JUMP WIRE - -	
J902	095G 90 23	JUMP WIRE - -	

C922	367G415X4713AT	EC 470uf 20% 16V 10X13 RS	
C918	367G415X6814AT	EC 680uf 20% 25V 10x20 RS	
	709G4744 HA001	CONSUMPTIVE ASS'Y	
E715	715G4744P01003001C	PWR PCB FR1 SS 193X132+1.6(mm)	2nd source
E715	715G4744P01003001M	PWR PCB FR1 SS 193*132*1.6mm	
IC801	056G 700 12	LED DRIVER OZ9998AGN-A1-0-TR SOP-24	
Q801	057G 763 92	FET P8008HV 4A/80V SOP-8	
R823	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R812	061G06031000FF	RST CHIPR 100 OHM +-1% 1/10W FENGHUA	
R845	061G06031000FF	RST CHIPR 100 OHM +-1% 1/10W FENGHUA	
R810	061G06031001FT	RST CHIP 1K 1/10W 1%	
R806	061G06031002FF	RST CHIPR 10 KOHM +-1% 1/10W FENGHUA	
R813	061G06031002FF	RST CHIPR 10 KOHM +-1% 1/10W FENGHUA	
R809	061G06031003FF	RST CHIPR 100KOHM +-1% 1/10W FENGHUA	
R807	061G06031009FF	RST CHIPR 10 OHM +-1% 1/10W FENGHUA	
R814	061G06031009FF	RST CHIPR 10 OHM +-1% 1/10W FENGHUA	
R833	061G0603109 JT	RST CHIP 1R 1/10W 5% TZAI YUAN	
R832	061G0603109 JT	RST CHIP 1R 1/10W 5% TZAI YUAN	
R831	061G0603109 JT	RST CHIP 1R 1/10W 5% TZAI YUAN	
R830	061G0603109 JT	RST CHIP 1R 1/10W 5% TZAI YUAN	
R829	061G0603109 JT	RST CHIP 1R 1/10W 5% TZAI YUAN	
R828	061G0603109 JT	RST CHIP 1R 1/10W 5% TZAI YUAN	
R827	061G0603109 JT	RST CHIP 1R 1/10W 5% TZAI YUAN	
R826	061G0603109 JT	RST CHIP 1R 1/10W 5% TZAI YUAN	
R804	061G06031202FT	RST CHIP 12K 1/10W 1%	
R805	061G06031203FF	RST CHIPR 120KOHM 1/10W FENGHUA	
R824	061G06035102FT	RST CHIP 51K 1/10W 1%	
R822	061G08051004FT	RST CHIP R 1 MOHM +-1% 1/8W	
R825	061G1206000 JF	RST CHIPR MAX0R05 1/4W FENGHUA	
F801	061G12060004JF	RST CHIPR MAX0R05 4A 1/4W FENGHUA	
R801	061G1206308 JF	RST CHIPR 0.3 OHM +-5% 1/4W FENGHUA	
R802	061G1206308 JF	RST CHIPR 0.3 OHM +-5% 1/4W FENGHUA	
C814	065G060310131J Y	CAP CHIP 0603 100P 50V NP0 +/-5%	
C805	065G060347412K 3	CAP CHIP 0603 0.47uF K 16V X7R	
C812	065G080510131J Y	CAP CHIP 0805 100P 50V NP0 +/-5%	
C801	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C803	065G080522141J Y	CAP CHIP 0805 220P 100V NP0 +/-5%	
C806	065G080522522K Y	NO-SUGGEST CAP 0805 2.2UF 10% 25V X7R	
C807	065G080522522K Y	NO-SUGGEST CAP 0805 2.2UF 10% 25V X7R	
L801	073G253S 80 X	SMD CHOKE 22uH 2.16A 3SMCH103R-220M HF	
ZD801	093G 60S907 T	SCHOTTKY B3100B 3A 100V SMB	
CN805	311GF050B12ADL	FFC CONN 0.5mm 12P R/A - 10.7MM	
E715	715G3918P03000004C	PWR PCB FR4 DS 80*45*1.6MM	
E715	715G3918P03000004L	CONVERTER PCB 45X80X1.6MM FR-4 D/S 1OZ	2nd source
SW002	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	

SW003	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW004	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW005	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW001	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
E715	715G4747K02000001C	KEY PCB FR1 SS 135*11*1.6mm	
U401	056G 562392	SCALER NT68677UMFG/E QFP-128	
U704	056G 563125 C	LDO G1117-18PT43U 1A 1.8V TO-252 7v	
U702	056G 563512 C	HF LDO G1117-33PT43U 1A 3.3V TO-252	
U601	056G 616110	AUDIO PAM8007NHR 3W SSOP-24	
U112	056G 662 21	IC AOZ8804DI DFN-10	
U110	056G 662 21	IC AOZ8804DI DFN-10	
U107	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U103	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U109	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U104	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U101	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U106	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U108	056G1133 34 1	EEPROM M24C02-RMN6TP 2Kb SO-8	
U105	056G1133 34 1	EEPROM M24C02-RMN6TP 2Kb SO-8	
U102	056G1133 34 1	EEPROM M24C02-RMN6TP 2Kb SO-8	
U402	056G2233501	FLASH MX25L2026DM1I-12G 2Mb SOP-8	
Q603	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q402	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q401	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q601	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q604	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q701	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q702	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q706	057G 763940	MOSFET AO3401A SOT-23	
R750	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R616	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R627	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R622	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R443	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R442	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R435	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R425	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R414	061G0402000 JT	RST 0402 0.05R MAX 1/16W -	
R104	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R103	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R102	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R154	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R142	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R141	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R140	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	

R139	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R138	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R137	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R136	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R135	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R702	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R630	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R461	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R460	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R408	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R407	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R162	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R119	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R118	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R115	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R602	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R418	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R417	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R416	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R153	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R129	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R717	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R705	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R704	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R632	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R631	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R607	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R605	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R604	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R404	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R405	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R410	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R412	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R426	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R428	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R601	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R603	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R422	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R721	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R620	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R419	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R403	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R402	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R431	061G0402105 JT	RST CHIP R 1Mohm 1/16W +/-5% TZAI YUAN	
R463	061G0402153 JT	RST CHIP 15K 1/16W 5% TZAI YUAN	

R462	061G0402153 JT	RST CHIP 15K 1/16W 5% TZAI YUAN	
R120	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R121	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R415	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R427	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R752	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R723	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R610	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R609	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R608	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R157	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R134	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R124	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R424	061G0402224 JT	RST CHIP 220K 1/16W 5% TZAI YUAN	
R612	061G0402333 JT	RST CHIP 33K 1/16W 5% TZAI YUAN	
R611	061G0402333 JT	RST CHIP 33K 1/16W 5% TZAI YUAN	
R438	061G04023901FF	RST CHIPR 3.9KOHM +-1% 1/16W FENGHUA	
R439	061G04023901FF	RST CHIPR 3.9KOHM +-1% 1/16W FENGHUA	
R440	061G04023901FF	RST CHIPR 3.9KOHM +-1% 1/16W FENGHUA	
R112	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R111	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R110	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R159	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R158	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R128	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R127	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R126	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R125	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R401	061G04024700FT	RST CHIP 470R 1/16W 1%	
R606	061G0402471 JT	RST CHIP 470R 1/16W 5% TZAI YUAN	
R719	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R701	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R458	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R156	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R155	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R133	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R132	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R123	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R122	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R109	061G0402750 JT	RST 0402 75R 5% 1/16W	
R108	061G0402750 JT	RST 0402 75R 5% 1/16W	
R107	061G0402750 JT	RST 0402 75R 5% 1/16W	
R624	061G0402751 JT	RST CHIP 750R 1/16W 5% TZAI YUAN	
R459	061G0402752 JT	ST CHIP 7K5 1/16W 5% TZAI YUAN	
R117	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	

R613	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R614	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R420	061G0603331 JT	RST 0603 330R 5% 1/10W	
R429	061G0603471 JT	RST CHIPR 470OHM +-5% 1/10W TZAI YUAN	
R454	061G1206301 JT	RST CHIPR 300 OHM +-5% 1/4W TZAI YUAN	
R455	061G1206301 JT	RST CHIPR 300 OHM +-5% 1/4W TZAI YUAN	
C474	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C472	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C436	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C429	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C428	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C427	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C426	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C425	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C422	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C602	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C604	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C621	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C701	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C704	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C705	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C708	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C712	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C714	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C750	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C420	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C101	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C114	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C115	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C117	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C118	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C119	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C123	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C125	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C404	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C405	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C418	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C414	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C412	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C411	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C410	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C409	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C408	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C407	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	
C406	065G040210412K Y	CAP 0402 100NF 10% 16V X7R	

C625	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R
C623	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R
C614	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R
C612	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R
C611	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R
C605	065G0402105A5K	T	CAP 0402 1UF 10% 10V X5R
C419	065G0402105A5K	Y	NO-SUGGEST CAP 0402 1UF 10% 10V X5R
C112	065G040222031J	A	CAP 0402 22PF J 50V NPO
C111	065G040222031J	A	CAP 0402 22PF J 50V NPO
C615	065G040222131J	T	CAP CHIP 0402 220pF 50V NPO
C616	065G040222131J	T	CAP CHIP 0402 220pF 50V NPO
C617	065G040222131J	T	CAP CHIP 0402 220pF 50V NPO
C618	065G040222131J	T	CAP CHIP 0402 220pF 50V NPO
C717	065G040222415K	T	CAP CHIP 0402 220nF K 16V X5R
C401	065G040222415K	T	CAP CHIP 0402 220nF K 16V X5R
C120	065G040222415K	T	CAP CHIP 0402 220nF K 16V X5R
C116	065G040222415K	T	CAP CHIP 0402 220nF K 16V X5R
C113	065G040222415K	T	CAP CHIP 0402 220nF K 16V X5R
C423	065G040247031J	Y	CAP 0402 47PF 5% 50V NP0
C424	065G040247031J	Y	CAP 0402 47PF 5% 50V NP0
C608	065G040247131J	Y	0402 470pF J 50V NP0
C609	065G040247131J	Y	0402 470pF J 50V NP0
C110	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R
C109	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R
C108	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R
C104	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R
C103	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R
C102	065G040247312K	Y	CAP 0402 47NF 10% 16V X7R
C606	065G0402474A5K	Y	CAP CHIP 0402 0.47UF K 10V X5R
C607	065G0402474A5K	Y	CAP CHIP 0402 0.47UF K 10V X5R
C107	065G040250931C	Y	CAP 0402 5PF 0.25pF 50V NP0
C106	065G040250931C	Y	CAP 0402 5PF 0.25pF 50V NP0
C105	065G040250931C	Y	CAP 0402 5PF 0.25pF 50V NP0
C610	065G060322422K	Y	CAP 0603 220N 25V X7R 10%
C622	065G060322422K	Y	CAP 0603 220N 25V X7R 10%
C624	065G080510615K	T	CHIP 10uF 16V X5R 0805
C613	065G080510615K	T	CHIP 10uF 16V X5R 0805
C475	065G080510615K	T	CHIP 10uF 16V X5R 0805
C473	065G080510615K	T	CHIP 10uF 16V X5R 0805
C471	065G080510615K	T	CHIP 10uF 16V X5R 0805
C470	065G080510615K	T	CHIP 10uF 16V X5R 0805
C417	065G080510615K	T	CHIP 10uF 16V X5R 0805
C416	065G080510615K	T	CHIP 10uF 16V X5R 0805
C415	065G080510615K	T	CHIP 10uF 16V X5R 0805
C413	065G080510615K	T	CHIP 10uF 16V X5R 0805

C403	065G080510615K T	CHIP 10uF 16V X5R 0805	
C402	065G080510615K T	CHIP 10uF 16V X5R 0805	
C603	065G120622615K T	CAP CHIP 1206 22UF K 16V X5R	
FB410	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB601	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB602	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB603	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB604	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB605	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB606	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB607	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB401	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB402	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB403	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB404	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB409	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB408	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB405	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB406	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB106	071G 59G301 EM	CHIP BEAD 0603 300R 25% 200mA	
FB105	071G 59G301 EM	CHIP BEAD 0603 300R 25% 200mA	
FB104	071G 59G301 EM	CHIP BEAD 0603 300R 25% 200mA	
FB103	071G 59K190 TA	CHIP BEAD 0603 19R 25% FCB1608KF-190T05	
FB102	071G 59K190 TA	CHIP BEAD 0603 19R 25% FCB1608KF-190T05	
FB101	071G 59K190 TA	CHIP BEAD 0603 19R 25% FCB1608KF-190T05	
CN501	088G 34019H VD	HDMI HEADER 19P V/T H=10.5mm	
D103	093G 60518SEM	SCHOTTKY BAT54C-HAF 0.2A 30V SOT-23	
D101	093G 64 42 L	DIODE LBAV70LT1G SOT-23 LRC	
D102	093G 64 42 L	DIODE LBAV70LT1G SOT-23 LRC	
ZD105	093G 39GA01 T	RLZ5.6B	
ZD103	093G 39GA01 T	RLZ5.6B	
ZD102	093G 39GA01 T	RLZ5.6B	
ZD101	093G 39GA01 T	RLZ5.6B	
D601	093G 64S522SEM	LL4148	
	709G46410HS001	COMSUMPTIVE ASSY	
E715	715G4641M01000004S	MAIN PCB FR4 DS 122*72*1.6MM	
	H52G1701 1	MESH PRINTTING_PAPER	